

Enhancing efficacy beliefs within a school community: Can Positive Psychology help?

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Declaration

I declare that this thesis is entirely my own and original work, and I have correctly acknowledged the work of others where necessary throughout. The work has been expressly undertaken to fulfil the purposes and objectives of this research study, and has not been partly or fully submitted at any previous time.

Furthermore, this thesis has been written in accordance with the University and School guidance on good academic conduct.

Signed:

Date: 12.11.2010

A handwritten signature in black ink, appearing to be 'H. Kometa', written over a horizontal line.

Abstract

A study was undertaken using a quasi-experimental design to investigate the effects of a Positive Psychology intervention, on the self and collective efficacy beliefs of staff within a mainstream primary school community.

Efficacy beliefs were selected as the topic of study due to their powerful and significant influence upon behaviour, such as effort and persistence; and protective factors such as resilience, personal well-being and achievement (Bandura, 1997).

Positive Psychology was selected on the basis that within the UK it has received little attention to date, and since it offers a focus on the positive aspects of human experience, it could be useful in affecting positive change in relation to efficacy beliefs.

A qualitative planning-phase enabled the generation of themes relating to areas of low efficacy within the experimental school; which formed the basis of a 14 item questionnaire designed to elicit views in relation to the themes.

Baseline data was established through administration of questionnaires in the intervention and comparison groups. Accompanying qualitative data was also obtained from the intervention group. Preparatory activities preceded a brief Positive Psychology intervention for the intervention group; following which post-intervention data collection was undertaken (as with the baseline).

Questionnaire data was analysed statistically and thematic analysis was employed with the qualitative data. Findings suggested that participants' efficacy beliefs had been enhanced in the experimental group, whereas this was not the case in the comparison group.

Enhanced efficacy beliefs corresponded to the themes investigated, and significant positive differences were noted in relation to teaching and non-teaching support staff. Areas highlighted by participants related to the four sources of efficacy beliefs (Bandura, 1997) and to school structure and culture.

Implications and limitations of the study were discussed along with possible areas for future research.

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Chapter 1: Introduction

In this chapter I will introduce my research study by outlining the research area, the origins of the study and the rationale behind my choice of topic. I will also provide insight into the epistemological underpinnings of the study and discuss the research design. This will provide the reader with some understanding of my intentions when planning and undertaking this study, and will provide background to the rest of the work included in the thesis.

1:1: Aim

The aim of the study was to investigate the possible impact of Positive Psychology on the self and collective efficacy beliefs of staff members within a primary school community. I did this by employing an intervention, which encouraged positive reflection and the recognition of skill and ability where participants perceived they held negative self-efficacy beliefs. The intervention was designed to enhance participants' self-efficacy beliefs in these areas thus enabling a more positive outlook and self-belief amongst the staff team.

The research questions I developed and investigated throughout the study were as follows:

1. Can the efficacy beliefs of school staff be enhanced through the application of a Positive Psychology intervention?
2. Are there significant enhancements relating to the specific domains identified as less efficacious by the school staff?
3. Does role impact upon capacity to alter efficacy beliefs?

1:2: Rationale

I decided to undertake this piece of research for a number of reasons. Firstly, I had been interested in Positive Psychology for some time. It is a fairly new field (Boniwell, 2006; Seligman and Csikszentmihalyi 2000), which originated in America, and there has been little subsequent work undertaken involving Positive Psychology within the United Kingdom. The research was intended to provide insight into the possible future uses of positive approaches and theory within the role of the British Educational Psychologist (EP).

Secondly, the other focus of the study, self-efficacy (SE), was selected on the basis of the powerful influence efficacy beliefs have over thought regulation processes; (Bandura, 1977;

1997) and how one's beliefs, if pessimistic, may prevent an individual from acting effectively, i.e. not employing the skills they possess (Bandura, 1977; 1997; Pajares, 1997; 2002). With contemporary psychologists beginning to move away from a medical model and considering a more interactionalist approach within their practice (Farrell *et al*, 2006) in order to meet the five outcomes of the Every Child Matters agenda (DfES, 2003), it is important to research areas such as the SE beliefs of adults working in schools, as this reduces the assumption that individual differences within children are the source of concerns. By working with the school staff in this way, it may be possible to not only affect change for them as individuals, but for the students with whom they work.

More information regarding the rationale behind my choices of Positive Psychology and self-efficacy will be provided in the following section (1:2:1; 1:2:2).

I opted to undertake a study that focused on the adults who are working to support the development of children and young people within a school community. I wanted to extend the focus beyond teachers to include other members of staff as they also have the power to influence the outcomes of the students (Alborz *et al*, 2009), or contribute to the school ethos as a whole. By empowering these individuals to recognise their skills and abilities, and by developing a more positive ethos, then theoretically the outcomes for their students may also be improved (Anderson *et al*, 1988; Armor *et al*, 1976; Ashton and Webb, 1986; Moore and Esselman, 1992; Midgley *et al*, 1989; Ross, 1992).

The Department for Children, Schools and Families white paper 'Your Child, your schools, our future: building a 21st century schools system' (2009), placed emphasis on the need for workforce reform within schools, in order to recognise the vision of an improved education system. As such it is necessary to work with adults who are supporting the education of children and young people as 'it is only the workforce who can deliver our ambition of improved outcomes...' (DCSF, 2009, p.14). This paper also links in with the inclusion of support staff within the study, as the paper outlines 'new and stronger expectations for the development of support staff' (DCSF, 2009, p.15). This serves to reflect the importance of support staff roles within schools, in terms of influencing outcomes; so supporting my decision to expand the sample to include those in non-teaching positions.

I feel that my research is relevant within the context of the Every Child Matters agenda, with links to the *enjoying and achieving* and *making a positive contribution* outcomes (DfES, 2003), as the aim of the study was to enhance the self and collective efficacy beliefs of adults within a school community, and thus improve outcomes in relation to this population. It is assumed that enhanced self-efficacy beliefs will enable participants to feel more confident

regarding their ability to undertake their roles, and in turn, result in improved outcomes for children and young people. Research which has associated enhanced teacher efficacy with positive effects on student outcomes includes: Allinder, (1994); Ashton and Webb, (1986); Gibson and Dembo, (1984); Meijer and Foster, (1988); and Woolfolk and Hoy, (1990).

1:2:1: Positive Psychology

Positive Psychology (Carr 2004; Seligman, 2002; Seligman and Csikszentmihalyi, 2000; and Seligman *et al*, 2005) may have an important role to play in the work of contemporary educational psychologists. By moving away from a medical model of psychology it is possible to draw upon the strengths and potential of individuals to facilitate positive change in both the school setting and the wider community.

Work in Positive Psychology (PP) was first published in the late 1990's. Subsequently, there has been relatively little relevant research in this area; specifically a lack of PP application in educational settings and within UK EP practice. I hoped that by implementing PP within a UK school setting, I would contribute to evidence supporting the use of PP in educational psychology practice.

PP forms an integral aspect of my research and its underlying theory. Seligman (2002), who is considered the founder of PP, summarised it as being the scientific investigation of optimal human function through the discovery and promotion of factors that enable individuals and communities to thrive. Additionally, Boniwell (2006), describes Positive Psychology as 'a science of positive aspects of human life' such as well-being, happiness and flourishing.

The PP movement was introduced to counter the 'disease model' that had dominated psychology since the Second World War. Its focus has been repairing damage, developing treatments and understanding the aetiology of mental illness (Boniwell, 2006; Seligman and Csikszentmihalyi, 2000). PP aims to shift the focus onto what makes life worth living and what makes ordinary people flourish in more benign situations.

The current climate within the education system, too frequently and habitually operates according to the traditional disease model as described above. Often a focus is placed upon individuals' areas of weakness, and a deficit model is employed, in order to obtain additional funding in the form of Statements of Special Educational Need or Local Authority equivalent funding. In fact, it has been found that statutory assessment has been considered one of the more unique and valued contributions that an EP can make (Ashton and Roberts, 2006). Whilst I acknowledge the importance, of highlighting areas of specific need on occasion, I

feel it is also imperative to emphasise what students do well, or how it is they are able to cope in difficult situations, thus providing a well rounded view of the individual.

It has therefore been my aim to actively apply Positive Psychology throughout my work as a trainee educational psychologist, and to open others' thinking to consider areas of strength and skill, and how these may be developed to foster a greater sense of self-efficacy and achievement amongst the student population.

Positive Psychology is considered to operate on three main levels. These are: the subjective, the individual, and the group level (Boniwell, 2006; Peterson, 2006; Seligman, 2002; Seligman and Csikszentmihalyi, 2000; and Seligman *et al*, 2005).

It has been implied that within these levels a theory exists, i.e. positive institutions facilitate the development of positive traits, these traits in turn facilitate positive subjective experiences, (Park and Peterson, 2003). Should this be the case, it will be exciting to investigate the impact that my research may have in creating a more positive institution, from which positive traits and subjective experiences may be developed.

A more critical account of PP will be included in Chapter 2 of the thesis.

1:2:2: Self-efficacy beliefs

Self-efficacy is described by Bandura, (1977; 1986) as an individual's self-judgment of their aptitude to initiate and effectively execute specified tasks at designated levels, to apply increased effort, and to persevere when faced with hardship and misfortune.

Bandura's (1977; 1986; 1997), social cognitive theory that underpins self-efficacy recognizes that human capability is an extremely diverse domain. As such, efficacy belief systems are viewed as distinctive groups of self-belief linked to specific areas of functioning and shaped by personal experience (Bandura, 1997). Efficacy beliefs are also linked to the regulation of thought processes, the ability to exert control over action, motivation, and physiological and affective states. Consequently the ability to function effectively does not simply rely upon an individual's understanding what to do and having the motivation to perform the required task.

The proposal that efficacy is not considered to be a fixed ability that one possesses or does not, was something that appealed to me. Instead, efficacy is seen as a generative capability in which a variety of sub-skills must be organized and utilized to serve any number of purposes. There are proposed differences between: possessing sub-skills, having the ability

to combine skills to develop appropriate actions and successfully carrying out the actions in a variety of specific and challenging circumstances. As such, Bandura offered explanation as to why individuals who possess and are aware of how to use their sub-skills, fail to perform optimally in certain situations, (Bandura, 1997). In other words self-efficacy is not restricted to the number of skills one has, but is based upon what an individual believes he can do with the skills he possesses, which I find a particularly empowering and enabling concept.

Thus, if we apply this explanation of self-efficacy to my study, it is possible to hypothesise that whilst the participants may have felt less efficacious about specific aspects of their roles, they may actually have been in possession of the skills and the ability to implement them. Therefore, participants' negative perceptions in relation to the identified themes may be a result of difficulty recognising and believing in their ability to succeed. My research study could in theory, unlock the potential of the participants by enhancing their efficacy beliefs through the process of positive reflection.

1:3 Origins of the study

Often in my professional practice I experience negative views from those adults supporting the young people they work with. These views are frequently related to the fact educational professionals are unable to solve a particular problem, lack the essential knowledge or skill to act or that they have tried everything that they know and have made little or no difference to the situation. In instances such as these I find myself searching for solutions with these adults, encouraging them to draw upon their knowledge and skills, to generate new ideas and to develop confidence in their ability to apply them. Consequently, I was inspired to focus my research upon developing the self-efficacy beliefs of such professionals.

Initially my study was intended to concentrate upon enhancing teacher efficacy (Bandura, 1993, 1997; Dellinger 2005; Dellinger *et al*, 2008; Soodak and Podell, 1996; Tschannen-Moran and Woolfolk Hoy, 2001; and Tschannen-Moran and Woolfolk Hoy, and Hoy 1998) within a school community. However, the more I contemplated what I understood a school community to be the more I realised that I was unintentionally excluding individuals who play significant roles in shaping the learning, social, and overall educational experiences of the student population. Thus, whilst I recognised teacher efficacy as an important construct, I felt it important that the scope of the study be broadened to include other team members within the school community.

When contemplating which staff to include in the study, my main criterion for inclusion was the frequency and proximity with which the staff worked with the students and whose self-

efficacy beliefs may be most significant in terms of affecting student outcomes. Therefore my proposed participants consisted of teaching staff, senior leaders, non-teaching support staff, and clerical staff.

Discussions with the Head Teacher in the planning stages of the research revealed he agreed the study should be restricted to certain staff, in order to bear the greatest relevance and not to dilute the potential impact of the study. It was for that reason that I opted not to include welfare staff, kitchen staff, and caretaking staff. Whilst this may not conform to others' constructs of a whole school community, on this occasion I needed to consider to whom the study would be most relevant and the extent of impact of the research should efficacy beliefs be enhanced.

Following a period of planning, which involved a focus group consisting of a randomly selected, representative sample of the school staff population and discussions with the Head Teacher, I was able to identify areas of negative efficacy belief. Subsequently a questionnaire was developed. This embodied the main themes generated throughout this planning stage. These themes included: presenting and public speaking; managing change; taking the lead; evaluating, giving, and receiving feedback; fulfilling extended aspect of role; and the idea of shared vision within the school.

1:3:1: The idea of intervention

The aim of the study was to enhance the efficacy beliefs of participants in relation to these identified areas of perceived negative efficacy. The notion of implementing an intervention is a complex one. In fields such as health, substance abuse, and specific learning difficulties, interventions are implemented when there is a problem to be fixed or a situation to be rectified. This is somewhat reminiscent of the medical model mentioned earlier and was not what I was aiming to achieve through the application of 'the three good things' PP intervention (Seligman *et al*, 2005). Whilst some staff may acknowledge that there were particular areas in which they felt less efficacious, they may not have felt the need to make changes in order to rectify this (Prochaska and DiClemente, 2005). Also I did not feel the areas of negative efficacy should be perceived as a problem, as this may not reflect the participants' views. Rather, my aim was to investigate the impact of PP on these beliefs, and given the circumstances and time constraints of my study, the use of a relatively simple and discrete intervention seemed reasonable.

I was however mindful that *doing something* to the participants or attempting to change their behaviour in an invasive manner was by my standards unacceptable. I anticipated that the

'three good things' intervention selected would be a gentle, reflective approach to enhancing efficacy beliefs. Furthermore, I consciously did not take an active or intrusive role during the course of the intervention. Following the initial request to engage in the process and explanation of what was involved; the participants were able to independently and flexibly engage with the task. However, the intervention used during the study was proven to be effective in terms of the process involved, i.e. rehearsal of positive thinking and the reframing of occurrences to view them positively. This process was intended to influence future reflection.

1:4 Epistemological position

Throughout my study I have adopted a Critical realist stance. Bhaskar (1989) posited there is a form of objective ontology, which exists and acts independently of human activity. In other words, there is a world which exists beyond human knowledge and which is not bound by our understanding and our language, and conceptualisation of world views (Johnson and Duberley, 2000).

This view was also represented by Trigg, (1980) who suggested that the idea of reality and how this reality is envisaged by individuals is entirely different; as our knowledge of reality is not absolute. Subsequently, many aspects of reality extend beyond our cognitive and linguistic capability.

critical realism therefore proposes a connection between the idea that the structures of the world are not constrained by the cognitive structures of its investigators (i.e. meta-physical realism), and the epistemological relativism, the idea that language (which is socially constructed and, therefore, theory laden), shapes science and in turn our understanding of scientific concepts. So, our entire understanding of reality is based upon language, and whilst this is not a neutral reflection of reality, it is all we have. So we may never be entirely certain about what it is we discover through scientific research (Johnson and Duberley, 2000).

This highlights the distinction between the intransitive focus of scientific investigation, the reality that exists and acts beyond human knowledge (i.e. ontology) and the transitive, socially constructed component, which is employed to understand our world, in a way that makes sense to us (i.e. epistemology). Bhaskar (1989) asserted that whilst the outcomes of scientific research are always transitive (socially constructed, i.e. driven by the investigator and their motivations) they are always centred upon an intransitive object. This is purported

to be because for there to be different interpretations of an intransitive object, it must exist in order for others to experience and interpret it differently.

Following Johnson and Duberley (2000, p 54) the fundamental position of critical realism can be summarised as follows:

1. Within critical realism there is a metaphysical ontology which professes that natural and social reality are made up of intransitive things which exist outside of human knowledge
2. These intransitive things may be unobservable, and as such individuals may capture different realities resulting from their own experience, history, culture, and model of the world.
3. As all language is theory laden, there is no way of describing things in a neutral way. Consequently a correspondence theory of truth is rejected.
4. 'Science' is not viewed as pure and objective as it is driven by those factors considered important to the investigators/researchers/scientists.
5. The positivistic model of science has little relevance to how science is conducted, but is relevant only in how scientists reason and justify their actions.
6. It is accepted within critical realism, that whilst some things in the social world are unobservable, it is possible to make observations and record our findings in an empirical way. This then allows us to consider what the world must be like if our theories about X are in line with our recorded findings. Consequently, retrodution, the idea of collapsing down a concept so that it fits with our understanding, is used to help us to form an accessible idea of the world.

So, in summary, the world is made up of two dimensions: the intransitive i.e. the unobservable which exists beyond our awareness; and the transitive, which is socially constructed and imposed upon the intransitive to enable us to make sense of the world. As such, critical realism provides a meta-theory, which encompasses both epistemological and ontological theory as it stresses, reality and absolute truth are beyond human comprehension; and any attempts to understand and/or investigate this reality are tied to our own social constructions.

So whilst my study is considering the impact of Positive Psychology on efficacy beliefs, my findings will be transitive and will not reflect reality, only my understanding of the social world and my understanding of the possible impact that my study may have upon it.

1:4:1 The use of a mixed methods design within a Critical realist framework

If, for my research study, I had opted to use only quantitative methods the focus of the study would be narrowed to consider only the structure of the situation I was researching, whilst qualitative methods would singly focus upon the agents involved.

By choosing to focus on one aspect by selecting either qualitative or quantitative methods I would in turn be excluding the other. Without focusing on both the structure and agency it is not possible to account for the entirety of social experience. Therefore if,

'the object of the study is an aspect of social life, then both types of approaches have to be utilised for a full or complete account to be developed' (Scott 2007, p.9)

By using and combining both qualitative and quantitative methods in the way that I did, I adopted a compensation approach (Ritchie 2003). Within the compensation approach it is suggested that the methodological inadequacies of one approach are compensated for by the other and in cases such as these the compromise between methods occurs at the ontological level. Therefore, the focus of research should be upon the interaction between the structural and agential levels of social interaction (Scott, 2007).

So, whilst qualitative and quantitative approaches operate using very different methods for conceptualising objects, if each is concentrated on different dimensions of social objects i.e. the structural and agential levels, then it is possible for the two to work in harmony.

Chapter 2: Literature Review

Within this chapter I shall explore the main theories underpinning my research; these include Positive Psychology, self-efficacy and organisational change. Research into these areas will be reviewed, along with critical perspectives given. Also included is an account of how relevant literature was obtained and how my research questions were formed.

2:1: The literature search

Prior to and during the course of the research project a number of sources were used in order to obtain the necessary literature. Firstly searches were undertaken using the following electronic databases: CSA Illumina, Education Databases, Scopus, Web of Knowledge and FirstSearch. Within these databases, searches were conducted using the following keywords: *Positive Psychology: research, practice, interventions, applications, definition, critique, Lazarus, future, schools, education, hope, optimism, subjective well-being, happiness and Seligman; Efficacy: self, collective, teacher, beliefs, social cognitive theory, measurement, education, support assistants, research, judgements, and Bandura; Organizational change, school culture.* Moreover, Boolean search terms were used. These involved 'and' searches such as: *Positive Psychology and self efficacy, self efficacy and collective efficacy, collective efficacy and Positive Psychology.* The Search engine 'Google Scholar' was also used throughout the thesis, this allowed me to undertake specific searches for articles cited in those previously found.

Secondly, personal contacts and experiences had a role in determining the literature I used throughout the course of my thesis. For example, colleagues recommended a number of the books used and other literature recommendations were made following a range of seminars I attended on Positive Psychology. Furthermore, electronic versions of articles deemed useful to these colleagues were also forwarded onto me via email, which in turn opened up other search avenues dependant on topic. . Literature provided by lecturers in University tutorials was also utilised during the project, especially in relation to organisational change and school culture, as a great deal of material had been supplied during these sessions.

2:2: Positive Psychology

In this section I will provide information regarding the Positive Psychology (PP) movement, its origins, main tenets and supporting evidence. A critique of Positive Psychology will also be included, highlighting the main points of contention within the literature.

2:2:1: Introduction to Positive Psychology

Within the last decade a new approach to applying psychology has emerged (Seligman, 2002; Seligman *et al*, 2005 and Carr 2004). The approach offers a new conceptual structure to the application of psychology within the Western World, with a predominant focus on the positive aspects of human experience. This approach is referred to as Positive Psychology (PP). Seligman described the movement as the scientific study of optimal human functioning (Seligman and Csikszentmihalyi, 2000). The reported objectives of the approach centre upon discovering and promoting the phenomena, which enable people to thrive (Boniwell, 2006). Seligman posited that the science of positive subjective experience, positive individual traits and positive institutions enables the enhancement of life experiences and prevents individuals from encountering pathologies which surface when life is empty and unfulfilled (Seligman and Csikszentmihalyi, 2000).

Seligman argued (Seligman and Csikszentmihalyi, 2000) that social and behavioural scientists have choices to make in relation to their practice. Either they continue to work to the traditional model of psychology, exploring the perceived deficits and impairments within human functioning; or they shift their focus towards developing research and an evidence base with regards 'the good life', developing well-being and resilience, investigating what makes positive individuals, and enables communities to flourish (Seligman and Csikszentmihalyi, 2000). Carr, (2004) accentuated this argument by highlighting that traditionally little recognition had been given to resourcefulness, resilience and capacity for renewal; he stated that this relatively new branch of psychology aims to complement the traditional deficit-based approaches.

PP is therefore defined as 'the scientific study of human strengths and happiness,' which is underpinned by a clear objective to base conclusions firmly on empirical and scientific evidence (Carr, 2004, foreword).

2:2:2: Rationale behind Positive Psychology

Positive Psychologists assert that mainstream psychology has predominantly been focused upon the negative aspects of life. Whilst there had been sporadic interest in areas such as optimism and creativity in the past, until the introduction of PP, there was no overarching framework to unite these theories (Boniwell, 2006; Peterson, 2006; and Seligman *et al*, 2004).

Seligman *et al*, (2004) proposed it was not intended that mainstream psychology become dominated by the study of deficit and disease; they claimed the focus of psychology was

determined by a number of factors. Prior to the WWII, psychology was identified as having three main roles. These were to cure psychological illness, enhance normal lives, and identify and nurture high talent. Following the war, when the USA was perceived to be on the brink of crisis, government funding was channelled into further understanding the aetiology and treatment of psychopathology and mental illness, as this presented an immediate and serious concern (Boniwell, 2006; Peterson, 2006; Seligman *et al*, 2004; and Terjesen *et al*, 2004).

Ironically in America, the newly founded National Institute of Mental Health was offering substantial grants for research into mental illness. Together with the 1946 Veterans Administrations Act, psychologists were able to generate good and stable income by studying pathology (Seligman *et al*, 2004).

Consequently, psychology came to operate within a disease model, i.e. repairing damage, (Seligman and Csikszentmihalyi, 2000). The thorough and concentrated study of psychopathology enabled psychologists to develop methods of classification, enabling clinical psychologists to accurately diagnose and measure symptoms of mental illness e.g. Diagnostic and Statistical Manual of Mental Disorders (DSM) (Seligman *et al*, 2004). Whilst this work produced many beneficial findings, psychology became a 'sub-field of the health profession; and psychologists were perceived as 'victimologists' (Boniwell, 2006 p 4) who considered human beings passive foci, upon which stimuli acted to elicit a response (Seligman and Csikszentmihalyi, 2000).

Positive Psychologists claim to not dismiss this wealth of research or the subsequent benefits to society; nor do they deny that there are unpleasant and distressing facets to life. Neither does it purport that other fields of psychological study are 'negative' (Gable and Haidt, 2005). The reported aim of PP is to redress the apparent imbalance in psychological research (Gable and Haidt, 2005; Sheldon and King, 2001), which has detracted from the fundamental investigation of enhancing normal lives and nurturing high talent (Boniwell, 2006).

The humanistic psychology movement of the 1950's delivered some promise of a new perspective, with its encompassing emphasis on growth and the authentic self (Boniwell, 2006; Resnick *et al*, 2001; and Seligman and Csikszentmihalyi, 2000). While the humanistic vision impacted widely on psychological culture, it rejected the quantitative 'scientific method' of research, stating that it had little to offer in terms of understanding the complexity of human beings (Boniwell, 2006; and Resnick *et al*, 2001). Consequently, the purely qualitative approach lacked the empirical basis required for it to be scientifically grounded in

traditional terms. Subsequently, humanistic psychology was rejected within numerous psychological circles (Seligman and Csikszentmihalyi, 2000). PP distinguished itself from humanistic psychology on the grounds that it welcomes the dominant scientific paradigm.

When Seligman became president of the American Psychological Association in 1998, he proposed psychology ought to be as focused on 'what is right with people [as it is] with what is wrong' (Seligman *et al*, 2004, p.1379). Seligman acknowledged the level of investment into clinical psychology and stated 'we are now able to make troubled people less miserable' (Seligman *et al*, 2004, p.1379). Moreover, Seligman highlighted that, within the USA, on average 30% of people suffer from acute mental disorder (Kessler *et al*, 1994) and that these individuals had, and would continue to receive excellent treatment as a result of psychological investigation. Seligman therefore argued the majority of the population (70%) had been overlooked. He suggested psychologists had a responsibility to correct this imbalance (Seligman *et al*, 2004).

In order to supplement research into mental disorder, Seligman called for scrupulous investigation into strengths and virtues, and the development of positive interventions enabling people to grow into happy individuals (Seligman *et al*, 2004; Seligman *et al*, 2005). Subsequently, the PP movement was presented as an opportunity to study human potential, strengths and virtues, rather than shortcomings and weakness; with a focus on researching the things that make life worth living, and nurturing what is best (Boniwell, 2006; Seligman and Csikszentmihalyi, 2000).

2:2:3: Three levels of Positive Psychology

Positive Psychology is considered to function at three distinct levels. These are: the *subjective*, *individual* and *group* level, (Boniwell, 2006; Carr, 2004; Peterson, 2006; Seligman and Csikszentmihalyi, 2000; and Seligman *et al*, 2004).

At the *subjective* level, positive subjective experience is proposed to consist of feelings such as happiness, satisfaction, contentment, pleasure, gratification, fulfilment, and optimism (Peterson, 2006; Delliagtti, 2004).

At the *individual* level, positive individual traits are reported to include strength of character, values, interests, the capacity for love, courage, wisdom and forgiveness, (Peterson, 2006; Seligman and Csikszentmihalyi, 2000).

At the *group* level, positive institutions are described as families, schools, organisations and communities which foster a sense of citizenship, social responsibility, nurturance, tolerance and altruism, (Boniwell, 2006; Clonan *et al*, 2004; Peterson, 2006; and Seligman and Csikszentmihalyi, 2000).

It has been implied within these levels a theory exists namely that positive institutions facilitate the development of positive traits and these traits in turn facilitate positive subjective experiences, (Park and Peterson, 2003).

The three pillars of Positive Psychology i.e. the study of positive emotion, positive traits, (including strengths and virtues see Appendix 1) and positive institutions (Seligman, 2002), have acted as a guide for PP research. Below I will examine some of these studies, which will be organised according to these subheadings. There is an absence of literature reporting work, which has sought to create, enhance or explore positive institutions. Rather the focus has been applying PP *within* institutions. Subsequently this will be considered in the place of positive institutions.

To date the majority of studies in relation to PP have however, been dedicated to reviewing the progress of the movement or justifying its existence; consequently, empirical research is limited.

2:2:4: Positive Psychology Research: The study of Positive Emotions

The main theory of emotion within PP is the 'Broaden and Build Theory of Positive Emotions' (Fredrickson, 2004). Fredrickson stated that positive emotions are not only markers of optimal human well-being, but they are instrumental in bringing about optimal human functioning. This notion was in part based upon the research of Diener *et al*, (1991) which suggested the ratio of positive to negative emotions can indicate an individual's subjective well-being. However, Fredrickson also asserted that positive emotions *produce* optimal functioning in the long term, rather than just at the time they are experienced (Fredrickson, 2004). This would imply that positive emotions, if cultivated, could ultimately act as method of enhancing one's well-being and psychological growth.

Like Seligman and Csikszentmihalyi, (2000), Fredrickson, (2004) highlighted the imbalance of study in relation to emotion. She asserted that, due to their links with mental illnesses that traditional models of psychology sought to alleviate, negative emotions had been the focus over the years (Fredrickson, 2004; Seligman and Csikszentmihalyi, 2000). Her broaden and build model of emotion was designed, to redress the balance within research and to highlight

the importance of positive emotions by capturing 'their unique effects' (Fredrickson, 2004, p. 1369).

Fredrickson (2004) recognised that models of emotion which incorporated the concept of specific action tendency (Frijda, 1986; Frijda *et al*, 1989; Lazarus, 1991) were based upon the assumption that emotion serves to limit thought-action processes in order to generate a particular response - e.g. fear is assumed to generate a perceived need to flee. This subsequently produces the necessary physiological and autonomic response enabling one to do so. Models such as these have highlighted the evolutionary nature of emotions i.e. emotions have equipped our ancestors with the necessary resources to escape potentially life threatening situations (Lazarus, 1991). However, this argument loses significance when applied to positive emotions as these rarely occur in such life or death scenarios.

Fredrickson (2004) proposed that positive emotions serve to act in the opposite capacity, to expand one's thought-action responses, thus generating an increased capacity for a variety of thoughts and actions. In her study, Fredrickson applied this theory to a number of positive emotions. One example cited by Fredrickson is that of joy. Joy is claimed to generate the urge to play, be creative and to stretch the boundaries, in an intellectual, artistic, social and physical capacity (Fredrickson, 2004).

One of the major benefits proposed by Fredrickson (2004) in relation to her theory of emotion is that it serves to develop our long term personal resources including physical (Dolhinow, 1987; Caro 1988; Boulton and Smith, 1992), social (Lee, 1983, Simons *et al*, 1986; Aron *et al*, 2000), and intellectual resources (Leslie, 1987; Sherrod and Singer, 1989; Panksepp, 1998). Through her research, Fredrickson maintained the prolonged and lasting effects of positive emotions outlast the fleeting products of their negative counterparts, concluding that as a result of experiencing positive emotion, individuals grow to become more socially integrated, resilient, creative, knowledgeable, and physically healthy (Fredrickson, 2004).

In summary, Fredrickson (2004) posited that positive emotion:

- a. Broadens capacity for thought and our subsequent action repertoire.
- b. Invalidates negative emotions. It is unlikely that one may experience both at once; so by intentionally experiencing positive emotions at a time when negative emotions govern, it is possible to reduce their capacity for lasting harm (Boniwell, 2006).
- c. Increases resilience in that they boost coping through positive reframing.
- d. Develops long-term personal resources.
- e. Gives rise to positive developmental growth; through enhanced emotional well-being.

Fredrickson (2004) sought indirect support for her theory across a range of research studies. However the theory has been the subject of some criticism, which will be explored more in section 2:1:8.

2:2:4:a. Positive Psychology Progress: empirical Validation of Interventions (Seligman *et al*, 2005)

Seligman *et al*, (2005), have also undertaken work regarding positive emotion, specifically happiness. In their paper, Seligman and colleagues reviewed a number of psychological interventions intended to enhance individual happiness; a goal born out of the idea that happiness is causal in that it generates a number of benefits besides good feelings, (Lyubomirsky *et al*, 2005).

The interventions were based upon Seligman's (2002) understanding of how happiness can be achieved. This in itself invokes the question of subjectivity; one raised frequently by critics of PP (Fineman, 2006; and Lazarus 2003a; 2003b). However, Seligman (2002) suggested that as happiness is such a weighty construct, it is necessary to consider 'better defined routes' towards achieving happiness before the scientific study of happiness is reasonably possible (Seligman *et al*, 2005, p.413).

These routes, defined by Seligman (2002) include: *the pleasant life*, arrived at through positive emotion and pleasure; *the engaged life*, accomplished through engagement; and *the meaningful life*, achieved through the application of meaning. According to research undertaken by Peterson and colleagues (2005b), the kind of lives that people strive to lead influences how satisfied they are and those who strive for all three i.e. the engaged, meaningful, and pleasant life (with the emphasis on the former two) tend to be the most satisfied. As such, within Positive Psychology, happiness is defined according to emotion, engagement and meaning (Seligman *et al*, 2005).

The interventions evaluated by Seligman *et al*, (2005) consisted of:

- a. **Gratitude visit:** Participants wrote and delivered a letter expressing their gratitude to someone who had shown them kindness but had not been suitably thanked for their actions. Letters were delivered in person by participants. (The focus of this exercise was to enhance gratitude).
- b. **Three good things in life:** Participants recorded three things that had gone well during the day and the causes of these each night, for a one week period.

Participants were also required to reflect on the 'good things' and to produce a causal explanation for each. (The focus was to enhance awareness of participants' most positive attributes).

- c. **You at your best:** Participants were required to think of a time when they were at their best. This also required reflection upon the personal strengths evidenced within the story. Throughout the course of a week, participants reviewed the story on a daily basis and reflected again on the strengths celebrated in it. (The focus of this exercise was to increase awareness of participants' most positive characteristics).
- d. **Using signature strengths in a new way:** Participants completed the online version of the inventory of character strengths (www.authentichappiness.org, accessed February 2009), which included personalised feedback regarding their 'top five strengths' (Peterson *et al*, 2005a). They were asked to select one of their top five strengths, and to apply it in a novel and distinct way each day for one week. (The focus of this exercise was to identify strength of character).
- e. **Identifying signature strengths:** Participants completed the same online version of the inventory of character strengths and received personalised feedback in relation to their 'top five strengths' (Peterson *et al*, 2005a). Individuals were then asked to apply these strengths more often during the course of one week. (As with 'using signature strengths in a new way', the focus of this exercise was also to identify strength of character).

Participants recruited via the internet were electronically assigned an intervention or a placebo intervention called 'early memories'. This involved participants recording their early memories each night over the course of one week (Seligman *et al*, 2005). Pre-tests and follow-up tests of happiness and depression were issued. The follow-up measures were issued immediately, one week, one month, three months and six months after the initial intervention had taken place. Of the initial sample 71% completed all necessary follow-up measures and the findings were based upon this reduced sample.

Seligman *et al*, (2005) reported that within the **Using signature strengths in a new way** and **three good things in life** interventions, measures of happiness were increased and measures of depressive symptoms were decreased over the six month follow-up period. The **Gratitude visit** demonstrated 'large positive changes' over the one month follow-up period, whilst the **Identifying signature strengths**, **You at your best** and **Early memories**,

(placebo) exercises produced positive but short-lived increases in happiness (Seligman *et al*, 2005, p.416).

These studies could be criticised on a number of levels. Firstly, the limitations of any self-report study would apply e.g. participants attempting to second-guess the researchers by providing socially desirable answers. Furthermore, participants were recruited using the Authentic Happiness website suggesting bias, i.e. those accessing the website had already shown interest in PP, and potentially indicated through accessing the site that improving their happiness was important to them. Therefore, they may have been more susceptible to the intervention or likely to provide answers, which would support the movement.

2:2:5: Positive Psychology Research: The study of Positive Traits

One key venture within the PP field has been the development of the Handbook and Classification of Character Strengths and Virtues (CSV) (Peterson and Seligman, 2004). This manual, based upon the concept of the Diagnostic and Statistical Manual of Mental Disorders (DSM) and designed to counterbalance it, has attempted to apply structure and consistency through the description and classification of strengths and virtues that are thought to facilitate human thriving. Peterson and Seligman (2004) noted and were keen to avoid the pitfalls of the DSM by including information about why entries were either included or excluded in their handbook.

The Classification of CSV was compiled following study of religious and philosophical traditions, review of literature pertaining to psychiatry, character education, youth development, psychology and organisational studies (Peterson, 2006; Seligman, 2002). Cultural products were also reviewed by researchers for content in an effort to compile an exhaustive list of character strengths.

The resulting main criteria used for strength selection were:

- a. Strengths are malleable psychological characteristics, fluid across different times and situations.**
- b. Strengths are morally valued in their own right, i.e. rather than for their outcomes.**
- c. Strengths are ubiquitous i.e. they are widely recognised across cultures, but perhaps not necessarily in all.**

(Peterson, 2006; Peterson and Seligman, 2004; Seligman 2002)

The compiled character strengths were assessed using surveys, interviews and informant reports undertaken with English speakers in the contemporary Western World (Peterson *et al*, 2005a). Peterson (2006) emphasised that work was being undertaken to translate the surveys into major language groups to access the views of non-English speakers. However work began with English speaking cohorts.

The surveys were the most wide reaching assessment tool employed; researchers were reportedly keen to establish the face validity and reliability of the instrument although information detailing how this was established was limited. There were two main scales used by researchers to assess the character strengths, the VIA Inventory of Strengths (VIA-IS) and the VIA-youth (adapted for ages 10-17yrs). These self-report measures were designed to be accessed and completed in one session and were made available online. Peterson (2006) reported almost 350,000 responses from over 200 nations.

The findings from the collected data suggested a 'remarkable similarity in the relative endorsement of 24 character strengths by adults around the world and within the United States' (Peterson, 2006, p. 153). Within the 54 countries that offered information, the strengths most commonly endorsed included: kindness, gratitude, authenticity, fairness and open-mindedness. Those strengths, which received least consensus, were prudence, modesty and self-regulation. Correlations of rankings between nations were reported to be very strong, thus overcoming variables such as cultural, religious, ethnic and economic difference (Peterson, 2006). Comparisons between adult and youth US populations showed agreement on the overall rankings of strengths, but to a lesser extent than when comparisons were made between adults across nations (Park *et al*, 2005).

Other findings demonstrated that strengths such as love, hope and gratitude were more strongly associated with life satisfaction than were more intellectual-based strengths such as love of learning (Park *et al*, 2005). Moreover, Peterson and Seligman (2003) compared the ratings for strengths including faith, hope and love, both immediately after and prior to the 9/11 disaster. Their findings indicated that subsequent to the disaster ratings for these strengths were increased; this pattern was not reflected in non-American responses.

The findings related to the 9/11 bombings serve to undermine one of the core principles of PP, i.e. that positive and negative can and should be separated. This example demonstrates that from horrific occurrences, positives emerge e.g. enhanced strength of character and resilience, which act as protective factors when encountering future difficulties (Fineman, 2006; Lazarus, 2003).

The virtues included in the Classification of Character Strengths and Virtues (CSV) have also been questioned in relation to the longevity they afford. As societies inevitably move on, it is only logical to assume the virtues they value do too; one example of such a change would be chivalry which is valued to a much lesser extent than during Victorian times (Fineman, 2006; Miner, 2004).

Furthermore, the accounts citing evidence for the findings regarding the CSV provide little information of the empirical analyses undertaken; also findings are subject to the limitations of both cross-sectional and survey design. Whilst initial findings seem supportive and exciting, it is worth noting that the population who generated them were all English speakers from the Western World. When the survey reaches other cultures, findings may be altered drastically. Moreover, the survey was online, so those without internet access would be unable to register their views; subsequently social economic status and place of residence e.g. the Third World or remote areas, might have excluded individuals from the process who may have had interesting and potentially contrasting views. Consequently the very foundations of PP are potentially flawed which has implications for future work undertaken in the areas encapsulated by the CSV.

2:2:6: Positive Psychology Research: The study of Positive Institutions

Literature in this area has tended to focus on the application of PP within organisations e.g. schools or the implications of PP for educational professionals. The following section will therefore focus on the possible application and implications of PP within education.

2:2:6:a Positive Psychology within education

Terjesen *et al*, (2004) highlighted the preventative nature of PP. They proposed working to enhance individual strengths and virtues would be likely to enhance the development of essential personal resources such as resilience, and enable children and young people to cope better in the face of future adversity. Terjesen *et al*, (2004) suggested PP principles might also guide the practice of educational professionals e.g. approaches such as consultation (Akin-Little *et al*, 2004). Thus, focusing on strengths rather than weaknesses would reinforce relationships between EPs, schools and parents whilst promoting more successful and positive outcomes. Terjesen and colleagues highlighted the benefits of preventing rather than repairing damage to basic human systems. Promoting a shift from a disease model to working with all children in a preventative way would have greater positive affect, than focusing support on a select few (Terjesen *et al*, 2004).

Terjesen *et al*, (2004) also touched upon the concept of Flow (Csikszentmihalyi, 2002) i.e. an intrinsically motivated activity, that challenges and involves full attention when striving for success. They cited examples of Montessori schools which encouraged Flow through *activity choice* and *serious play*, and suggested that more work was needed into how Flow may be promoted in schools.

Another focus within Terjesen *et al*'s, (2004) paper was positive affectivity, i.e. the extent to which individuals experience positive emotion. They suggested EPs and schools should work collaboratively to increase positive affectivity e.g. promoting engagement in social behaviour and physical exercise on the premise that it is better to increase positive affectivity through doing rather than thinking. Furthermore, Terjesen *et al*, (2004) suggested indirect techniques to encourage positive emotion should be adopted, e.g. engaging in pleasant activities such as being creative and socialising, in order to foster a sense of contentment.

Both Peterson (2000) and Terjesen *et al*, (2004) highlighted ways in which schools might implement PP. However, they did not offer any evidence or support for doing so; nor did they provide example of how practitioners might apply PP within their learning environments. Thus this seems based more on conjecture rather than any solid evidence base and is, perhaps, rather uncritically self-promoting.

Clonan *et al*, (2004) also reviewed schools within the context of positive institutions. The article centred on how the PP paradigm shift served to promote positive human development and how schools, as the institutions, could act as the vehicle for this advancement (Park and Peterson, 2003). Like Terjesen *et al*, (2004); Clonan *et al*, (2004) also emphasised the benefits of prevention-oriented practice in enhancing academic and social outcomes for all. The three areas, described by Clonan *et al*, (2004) as instrumental in developing positive school psychology were: *prevention*, *consultation* and *competency development/resiliency*.

With regards prevention, Clonan *et al*, (2004) offered brief insight into a number of models, before citing others' conclusions that a range of preventative interventions should be undertaken within school, particularly those which involve modification of the environment to reduce stressors while modifying the individual to increase competency, or modifying both simultaneously. The language used did not seem particularly positive i.e. 'modification of the individual' (Clonan *et al*, 2004, p.103) and was perhaps reminiscent of the disease model PP is purportedly working so hard to eradicate.

Clonan *et al*, (2004) recommended that consultation should be used with teachers or at a service level rather than directly with students; in order to affect change on a greater scale. They subsequently related consultative practices to the development of PP within school systems when they were used to address the development of competencies related to the overall well-being and positive development of the student population.

The notion of competence development was proposed to be influential in developing the positive institution framework (Clonan *et al*, 2004). They highlighted the protective benefits of competencies, such as resiliency, which act as a buffer between individuals and the difficulties they face. Additional competencies related to developmental tasks such as academic skill, 'rule governed behaviour' and pro-social peer interaction were also highlighted, as was the necessity for these competencies to be enhanced across different environments to foster resiliency in whole populations (Clonan *et al*, 2004, p.104).

Clonan *et al*, (2004) concluded that building positive institutions forms a good basis on which to enhance the positive development of whole student populations. They proposed that working within existing structures and cultures is the most effective method of implementing change within institutions and may act to reduce possible resistance. A shift from reactive to proactive systems and attitudes was also highlighted as essential, together with synchronicity between the objectives of the initiative and expectations, and values of those involved.

When considering the suggestions put forth by Clonan *et al*, (2004), I was able to draw direct comparisons between my current work and their recommendations. This may suggest that whilst the strategies outlined above are considered instrumental in developing positive institutions they also form the basis of general good practice. How much PP is involved in the shaping of positive institutions could therefore be questioned, as the suggestions made within this article are clearly familiar within other approaches currently adopted by EPs. This may reflect that within the UK, EPs are in advance of US school psychologists; however, this may also reflect the proposal that PP is taking existing theory and practice and simply repackaging it as something new (Lazarus, 2003; 2003).

2:2:7: Criticisms of Positive Psychology

The main critic of PP is Richard Lazarus, (2003a; 2003b). He described PP as facing the danger of becoming 'just another of the many fads that come and go' (Lazarus, 2003a, p 9) as he considered the movement built upon shaky foundations. Lazarus, (2003a) claimed that PP had been marketed in almost an evangelical way, which encouraged interest and enthusiasm in the movement. However, for Lazarus, PP lacked sound theoretical and

philosophical rationale. He claimed that PP was based around over-simple doctrines, reliant on slogans to 'whip up enthusiasm for a vague and old-hat ideology' (Lazarus, 2003a, p.107), and alleged that Seligman and his colleagues (1990; 2000; 2003; 2004; 2005) had launched an attack on past psychological work in order to promote their own. Lazarus emphasised the need to consider the bad in order to appreciate the good, and that without doing so, much needed perspective would be lost. He did not condemn the idea of shifting focus a little more towards the positive, but stated that this should not be at the expense of the negative, as by rights they should not be considered separable.

Lazarus' criticisms of PP take three main forms; these relate to the study of positive emotion, the methodological and conceptual problems and the philosophical basis for PP. I will begin by considering the former.

2:2:7:a. Critique of Positive Psychology and emotion

Lazarus based his criticism of positive emotional theory around the constructs of meaning, appraising and coping (Lazarus, 2003a; 2003b). 'Rational meaning', according to Lazarus (2003a; 2003b), represents the significance of an emotional encounter in terms of an individual's well-being; the meaning is thought to be the cause of the emotion and is brought about through appraisal of the personal significance. This theory accounted for individual differences and assigned a different relational meaning to each discrete emotion. On this basis Lazarus questioned the positioning of such individual emotions into two very general categories, positive and negative. He argued essential information regarding the distinctive role of emotion was lost and individual differences were essentially forgotten. On the basis of this Lazarus (2003a; 2003b) argued, any conclusions drawn by PP regarding emotion would subsequently be misleading.

The process of 'coping' was also emphasised by Lazarus as fundamental within the process of emotion and central to the cognitive-motivational-relational process of producing emotion; specifically when problems are exposed through appraisal. He, therefore, claimed this to be significant when evaluating the PP movement, as PP supports the idea of reframing negative occurrences in a positive light (Seligman, 1999). Lazarus (2003a; 2003b) highlighted two methods of coping: emotion focused coping, i.e. no attempt to alter situation, but simply to reappraise more positively (which he associated with PP), and problem focused coping, i.e. a pro-active approach to changing one's situation. Therefore, to adopt actions suggested by PP would be to adopt a passive approach to coping. Furthermore, Lazarus (2003a; 2003b) contended that in order to cope effectively with a situation, one must be aware of the realities

faced otherwise appraisal becomes limited and inadequate, and jeopardises well-being. Therefore to ignore negativities within reality is to diminish the effectiveness of appraisal, at the expense of well-being.

2:2:7:b. Methodological concerns

Lazarus (2003a; 2003b) raised concerns regarding the cross-sectional research designs employed in many PP studies. He emphasised the lack of causality evidenced through cross-sectional designs due to the lack of comparison over time, or circumstance using the same participants. Consequently, Lazarus proposed that through the application of cross-sectional design, other antecedents could not be ruled out, and so no firm conclusions could be drawn.

Three sub-problems were also highlighted in relation to emotion valance (Lazarus, 2003a; 2003b). Firstly, Lazarus highlighted the 'failure to question the basis for attributing a positive or negative valance to a prior-named emotion' (Lazarus, 2003a, p98). By emphasising the social context of emotion, i.e. emotions are considered positive when: they feel good subjectively, they are generated by favourable life conditions, and they result in a pleasing social outcome. Lazarus consequently stressed the subjective nature of positive emotions, i.e. the happiness of one individual, could in fact prove a source of unhappiness for another.

The second sub-problem emphasised was that advantages of studying discrete emotions were passed over in favour of making general comparisons. Whilst the third questioned the fixed and opposite status assigned to positive and negative emotions on the basis that all emotions have the potential to be either, both, or even the same (Lazarus, 2003a).

2:2:7:c. Philosophical concerns

Criticisms at the philosophical level related to the idea that changing one's way of thinking from negative to positive is more difficult than one may first think. Often major personality changes result from trauma or crisis; e.g. it is possible that personal development may advance through adversity, by shaping one's identity, character and moral strength, (Fineman, 2006) together with the ability needed to survive and flourish (Lazarus, 2003a). Lazarus (2003a; 2003b) refuted Positive Psychologists' criticism of traditional models of psychology on the grounds that they were considered negative. He indicated that the study of concepts such as coping with stress/adversity also incorporated the study of favourable resources and circumstances required for health, adaptive effectiveness and well-being. Coping, for example, is proposed to be as focused on success as it is failure, and, as

Lazarus considered success and failure to be interdependent, he further critiqued the merits of separating the concepts of positivity and negativity.

2:2:7:d Additional critical perspectives of Positive Psychology

Fineman (2006) also criticised PP on a number of levels. He firstly contended the assumption of positivity; i.e. that given the opportunity, all individuals would connect with the world in a positive and pro-social manner. In other words there is a predisposition to acting in ways perceived as good. This idea, supported by PP, assumes that everyone has the capacity for positivity and fulfilment, but is constrained by their social environment. As such, positivity separates the 'core positive essentialism' (Fineman, 2006 p 273) of the person from their social environment; which given human beings exist within social systems, separating the two makes little sense (Fineman, 2006).

Fineman (2006) also suggested that the subjective nature of positive constructs might be problematic. Like Lazarus, Fineman questioned the merits of separating positive and negative emotion, i.e. positive appraisals evolve from negative experiences, just as the opposite is possible, and the continual relationship means that differently valued outcomes are possible resulting from subtle blends of positive and negative emotion (Fineman, 2006) e.g. happiness may trigger feelings of anxiety regarding its permanence, or love experienced with bitterness can result in feelings of jealousy.

Fineman, (2006) also questioned the way in which PP has been marketed, i.e. imposing such a moral agenda, has effectively undermined the inquiry role of psychology. He questioned the empiricist approach adopted by PP emphasising that inquiry should extend beyond Positive Psychologists' need to be viewed as operating scientifically, since these methods were not perceived to complement the message promoted by PP. Fineman (2006) therefore suggested that more intensive qualitative methods such as phenomenological enquiry, interpretive, or discourse analysis, may be a better tool in the investigation of PP.

In summary I can identify with the principles of PP, the researching and working to enhance the strengths of individuals and institutions. However the theory underpinning PP has been exposed as flawed on a number of levels. As such I am currently inclined to agree with Lazarus (2003a; 2003b), that unless further work is undertaken to establish a sound basis for the movement, it may be in danger of being passed over as another fad in the field of psychology.

2:3: Self-efficacy

The concept of self-efficacy (SE) was first introduced by Bandura (1977). He asserted that behaviour is strongly influenced by one's beliefs regarding capabilities and possible outcomes. Bandura (1994 p 71) defined SE as an individual's self-judgment of their aptitude to: initiate and effectively execute specified tasks at designated levels, to apply increased effort, and to persevere when faced with hardship and misfortune.

According to Bandura (1986), it is not possible for individuals to master all aspects of human activity given the resources, time and effort this would require. The fields in which people develop competency are therefore determined by a combination of socio-cultural experiences, natural aptitude, and the circumstances to which the individual is exposed throughout their development. Consequently people tend to vary in the areas they develop efficacy and the levels to which they develop it, (Bandura, 1986).

Bandura's (1986) later work went on to place the construct of self-efficacy within his social cognitive theory of behaviour. This theory deviated from many other widespread cognitive beliefs as it based cognitive development within a 'sociostructural network of influences' (Pajares, 1997 p 1).

2:3:1: Self-efficacy within social cognitive theory

Self-efficacy (SE) beliefs make up a component of the self-beliefs implicated in Bandura's theory of social cognition (see Bandura, 1986, 1997). Perceived SE is described by Bandura (1997, p.3) as an individual's beliefs in their capacity to 'organize and execute courses of action required to produce given attainments.' SE beliefs are contextual as they refer to the self-judgement of ability to bring about specific outcomes in relation to task and situation. According to Bandura, (1997) SE beliefs are developed as a result of the interpretation of information from four main sources. These include: enactive mastery experiences, vicarious experiences, verbal persuasion and social influences, and physiological and affective states (Bandura, 1997).

2:3:1:a. Mastery experiences

Mastery experiences are thought to be the most powerful of the four sources, as they correspond to previous attainment; this provides authentic evidence on which to base SE beliefs (Bandura, 1997; Pajares, 1997; Usher and Pajares, 2008).

Mastery experiences act to influence SE though competency judgements made by individuals following the interpretation and evaluation of their behaviour and its related outcomes (Bandura, 1997). If for example, an individual has undertaken a task and they perceive their actions to have been successful, their SE beliefs regarding their ability to perform competently in related and similar activities will have been enhanced. However, mastery experiences can equally have the converse effect; should an individual perceive their actions to be ineffective in producing the desired outcomes, their SE beliefs in relation to this or similar tasks will be weakened (Usher and Pajares, 2008).

Bandura, (1997) asserted that mastery experiences are especially powerful when an individual manages to succeed in challenging tasks, or they are able to overcome barriers. Subsequently, despite occasions of failure, efficacy beliefs are generally enhanced when an individual notices an improvement in their abilities over time. Similarly, efficacy beliefs can be undermined if an individual has invested a great deal of time and effort without seeing an improvement in their skills/abilities (Usher and Pajares, 2008).

2:3:1:b. Vicarious experience

Along with evaluating and interpreting their own actions individuals use vicarious experiences of others, i.e. observing the effects produced by others' actions (Pajares, 1997; Usher and Pajares, 2008). Using the competence of others as a measure of one's own ability is less powerful than mastery experiences. However, vicarious experience becomes more significant when there is no accurate reference for success (Usher and Pajares, 2008), or when an individual is unsure about their capabilities, or has limited personal experience to draw upon during the interpretation or evaluation process (Bandura, 1997). An individual's self-appraisal may be more generous, if in context, they had out-performed their peers, resulting in enhanced SE beliefs. However, if their peers had performed more successfully than them, it is likely SE beliefs would be diminished (Usher and Pajares, 2008).

Within the context of vicarious experience, social models are considered to play an important role in the development of SE beliefs (Bandura, 1997; Schunk, 1981, 1983, 1987; Pajares, 1997; Usher and Pajares, 2008). Individuals use models as a reference for comparison, allowing self-judgements of ability to be made. Coping models, i.e. those who demonstrate persistence and determination to succeed, are considered to be highly influential in enhancing SE beliefs whilst mastery models, i.e. those who respond poorly and dismissively to errors, have a lesser impact (Schunk, 1983, 1987).

Furthermore, the most influential vicarious information is derived from models that are perceived to be comparable in ability. However, other similarities to the individual including ethnicity, gender and age are also thought to be significant in determining SE beliefs (Usher and Pajares, 2008). Bandura (1997) noted that similarity is not an essential criterion when selecting social models, as individuals will also derive information from those that represent prestige, power and their aspirations when developing their SE beliefs.

As with the other sources of efficacy, models can negatively impact upon one's efficacy beliefs especially when a model considered equal or superior in ability to the appraising individual, fails at a task which they perceive to be straightforward (Brown and Inouye, 1978; Usher and Pajares, 2008).

2:3:1:c. Verbal persuasion and social influences

SE beliefs are also created and modified as a consequence of feedback from others. This feedback represents an external judgement of one's capabilities. While feedback is less influential in shaping efficacy beliefs than are mastery or vicarious experiences, it has a significant role to play in the development of perceived efficacy (Zeldin and Pajares, 1997).

Verbal persuasions incorporate words of encouragement and praise but for persuasions to be effective, they must represent genuine positive appraisals of an individual's ability, rather than flippant and meaningless responses (Bandura, 1997). It is necessary for those using verbal persuasion to promote individuals' beliefs in their abilities, at the same time that goals set are achievable. Negative social influences or verbal persuasions can be extremely powerful in undermining the development of SE beliefs. It is in this respect that verbal persuasions appear most influential (Pajares, 1997; Usher and Pajares, 2008).

2:3:1:d. Physiological and affective states

Physiological and affective states such as mood, arousal, anxiety and stress also act to inform SE beliefs. The reciprocal nature of social cognition means that SE beliefs are also able to modify one's physiological condition (Bandura, 1986). Individuals are able to interpret their physiological arousal as a measure of their proficiency, through the evaluation of their performance across different situations (Usher and Pajares, 2008), i.e. their physiology acts as an indicator for their perceived level of competence. For example, an intense emotional reaction to an activity/task would serve to inform the individual about their outcome evaluation (Pajares, 1997).

Bandura (1997) stated that an optimal level of arousal can produce best possible performance. Therefore, the affective arousal produced through worry and negative thought can serve to lower SE beliefs, spark greater anxiety, and in turn increase arousal to an obstructive level permitting self fulfilling prophecy to transpire (Pajares, 1997). Consequently, to enhance SE beliefs, negative emotional states must be reduced and physical and emotional well-being promoted (Usher and Pajares, 2008).

Affective state can also impact upon one's perceived capabilities via the interpretation and evaluation process. If an individual adopts a pessimistic outlook, it is likely that errors made will be interpreted as indicators of incompetence. However, optimism and positive mood can enhance motivation, SE beliefs and achievement (Seligman, 1990).

2:3:2: Effects of self-efficacy beliefs

Self-efficacy (SE) beliefs are thought to impact upon behaviour in a number of significant ways. Firstly, SE beliefs affect the choices made and the resulting courses of action (Bandura, 1997; Pajares, 2002). Individuals engage in tasks in which competency is perceived to be greatest, while avoiding those they perceive to be less competent in achieving. Consequently, SE beliefs influence the interpretation of previous experience which in turn determines the areas in which individuals perceive they have control. It is these judgements which shape the choices made and behaviours undertaken in life (Pajares, 2002).

SE beliefs also influence the effort invested by individuals when undertaking specific activities together with the levels of perseverance when faced with difficulty. This impacts upon how resilient individuals are when challenged by difficult or adverse situations. Levels of persistence, effort and resilience are proportionate with the level of SE beliefs, i.e. the greater the efficacy the greater these factors will be (Bandura, 1997; Pajares, 2002).

The levels of anxiety and stress experienced when undertaking a task are also influenced by SE beliefs, (see section 2:2:1:d). This in turn impacts upon the level of overall accomplishment experienced by individuals and their ability to succeed in such situations (Bandura, 1997; Pajares, 2002).

A strong positive sense of efficacy is also considered beneficial in developing personal well-being and achievement (Bandura, 1997; Pajares, 2002), by fostering a strong sense of competence and control, approaching challenges in more constructive and advantageous

ways, and attributing failure to flexible factors such as effort and knowledge (Bandura, 1997; Pajares, 2002).

As SE beliefs are so influential in ultimately determining accomplishment, Bandura (1977; 1986; 1997) asserted that they are vital determinants of human agency.

2:3:3:How self-efficacy differs from self-concept beliefs

Self-efficacy centres on one's beliefs in relation to personal capability, i.e. the judgements regarding ability to undertake a specific task. Self-concept is more general in nature and involves evaluation of competence along with feelings of self-worth associated with behaviours (Pajares, 2002). With regards SE beliefs, there is no relationship between self-perceptions of competence and feelings of self-worth, i.e. how one feels about oneself is not necessarily influenced by perceived efficacy in relation to a specific task (Bandura, 1997).

SE beliefs are also task and context specific, (Bandura, 1977; 1986; 1994; 1997; Pajares, 1997; 2002) and as such are extremely sensitive to contextual factors impacting upon task related capabilities. Self concept judgements are however, less context-specific. They are more general evaluations and therefore, less sensitive to contextual factors (Bandura, 1997; Pajares, 2002).

Whilst there remains some debate regarding the inherent differences between SE and self-concept, the level of specificity and sensitivity to context provided by SE has meant that it is often perceived as the superior construct in terms of determining domain-specific competency beliefs, whereas self-concept is considered better able to predict related academic outcomes (Graham and Weiner, 1996).

2:4 Self-efficacy in education

The focus of SE research in education to date has centred upon teachers and students. Governmental call for educational reform has increased awareness and curiosity regarding the factors underlying school conditions and systems (Soodak and Podell, 1996). Teachers have been the focus of much educational research on the grounds that they are considered fundamental and highly influential components of the environments in which children learn (Bandura, 1994). Strong SE beliefs are considered central to a teacher's capacity to positively influence, and cultivate the cognitive development of their students (Bandura, 1994). Therefore, those teachers with an elevated sense of efficacy regarding their capacity

to undertake their roles effectively, hold the power to amplify both students' motivation to learn and the cognitive skills required to do so (Bandura, 1994).

According to Bandura's SE framework (1977; 1997) student behaviour can be more accurately determined by the beliefs held about their capabilities, rather than their actual level of accomplishment. In other words students' SE beliefs are the determining factor in how they apply their skills and knowledge. Subsequently, academic difficulties encountered by students are often related to their self perceptions of ability and problems present themselves due to incapacity to believe they can undertake tasks successfully (Pajares, 2002).

As my study involves the SE beliefs of a staff team within a school community, the main focus of this section will be the research pertaining to the SE beliefs and collective efficacy (CE) beliefs of teachers. However, I ask the reader to be mindful that the aim of my study was to extend the concept of teacher efficacy to consider the whole staff team. So, while the evidence presented here is relevant in some respects, it is not representative of all participants involved which in the most part, is due to gaps in the existing knowledge.

2:4:1: The confusion surrounding teacher self-efficacy

There is a history of uncertainty surrounding the study of teachers' self-efficacy beliefs, stemming from confusion between two quite different concepts. These are *teacher self-efficacy* and *teacher efficacy* (Dellinger *et al*, 2008). *Teacher efficacy* (TE) was first classified and measured by researchers from the RAND Corporation in the 1970's (Berman and McLaughlin, 1977; Armor *et al*, 1976). In this respect TE represented a teacher's belief in their capacity to influence student performance, i.e. this corresponded to outcome expectancy. The measure of TE developed by the RAND Corporation was based upon Rotter's (1966) locus of control theory, rather than Bandura's (1977) construct of SE.

Nevertheless, in the years and research that followed the RAND studies, the terms *teacher self-efficacy*, *teachers' sense of efficacy* and *teacher efficacy* were subsequently used interchangeably and often misleadingly, as the concept under study was often misrepresented by the TE definition developed during the RAND studies (Dellinger, 2005; Dellinger *et al*, 2008). Additionally, in cases where the concept under study did reflect Bandura's (1977, 1986, 1997) definition of SE beliefs, the measurement instruments were often unsuitable and therefore failed to assess teachers' self-efficacy beliefs with any degree of validity (Dellinger *et al*, 2008). So to clarify, teacher efficacy (or teacher's sense of efficacy) represents a teacher's belief in their ability to influence student performance,

whereas teacher's self-efficacy refers to teachers' beliefs in their ability to perform tasks and context specific aspects of their role. It is the latter which broadly forms the basis of my research study.

2:4:2: Research regarding the measurement of teacher self-efficacy

A great deal of the research surrounding teachers' efficacy beliefs has centred upon the evaluation and critique of instruments designed to measure the construct. As mentioned previously, the task of measuring teachers' efficacy beliefs has been clouded by theoretical issues that have hindered the successful conceptualisation and effective measurement of teachers' efficacy (Dellinger *et al*, 2008). Many of these studies have resulted in a re-conceptualisation of TE along with instruments perceived by their creators as superior in measuring the construct. I will explore some of the research within this section.

Tschannen-Moran and Woolfolk Hoy (2001), and Tschannen-Moran and Woolfolk Hoy, and Hoy (1998) have undertaken extensive reviews of the existing measures of TE. Measures of TE based on Rotter's (1966) locus of control theory including the RAND studies (Armor *et al*, 1976), Guskey's (1981) responsibility for student achievement, Rose and Medway's (1981) teacher locus of control, and the Webb scale (Ashton *et al*, 1982) were all reviewed and found to be flawed at a number of levels. These scales were critiqued and subsequently rejected as effective measures of TE by them (Tschannen-Moran and Woolfolk Hoy 2001; Tschannen-Moran and Woolfolk Hoy, and Hoy 1998).

A number of TE instruments based upon Bandura's (1977) social cognitive theory were also explored. These included: the Ashton vignettes (Ashton *et al*, 1984); Gibson and Dembo's (1984) teacher efficacy scale (TES), the subject-specific modifications of the TES e.g. The science teaching efficacy brief instrument, (Riggs and Enochs, 1990), Emmer's (1990) classroom management modification, Coladarci and Breton's (1997) special education modification and Bandura's (1997) teacher self-efficacy scale. The outcome of this review served to further spotlight the theoretical tangle regarding the conceptualisation of TE. Tschannen-Moran and Woolfolk Hoy, (2001) concluded that none of the scales reviewed had successfully managed to balance the notions of specificity and generality, nor had the measures stood up to scientific rigour.

Following their review of existing TE measures, Tschannen-Moran and Woolfolk Hoy, (2001) presented their new measure of TE, the Ohio State teacher efficacy scale (OSTES). Whilst the scale assessed a broader range of teacher capabilities, (Tschannen-Moran and Woolfolk Hoy, 2001), I felt there were a number of shortcomings. Firstly, it was created in America,

and one would question the extent to which the scale could be generalised across different cultures and educational systems. In addition, the scale items represented the capabilities of teachers within the traditional teaching role. But, within modern British education systems, the role of the teacher is expanding well beyond the classroom. As such, the scale offered quite a narrow perspective of the capabilities required in a modern teaching role; this is something I intend to explore through my research.

Similarly, Dellinger *et al*, (2008) reviewed the misconception surrounding TE and indicated the need for an evidenced based measure of TE, grounded in the classroom. Their scale, the teacher efficacy beliefs system self (TEBS), considered TE at three levels, *teacher self-efficacy*, *teacher work group collective efficacy*, and *teacher faculty collective efficacy*. The focus of the paper however was the teacher self-efficacy measure.

As with previous studies, Dellinger *et al*'s, (2008) research was based in America, and so may not translate sufficiently well to other cultures and education systems. This, along with the particularly narrow focus of 'classroom based' teacher capabilities was noted by Dellinger *et al*, (2008) who, in their discussion, acknowledged the limited reach of the scale and suggested that it may be employed as a model for the creation of further self-efficacy scales. There was, however, no descriptive information provided regarding the 'professional educators' who were responsible for the inclusion of scale items, and so whilst variables such as age, gender, experience and ethnicity may have influenced their ratings, they were not explored.

2:4:3: Research regarding models of teacher efficacy

Soodak and Podell (1996), reviewed the research regarding the conceptualisation of TE, and reported that the origins of most models were generally based around Bandura's (1977; 1993) framework of self-efficacy. Through his work, Bandura had identified two cognitive sources of motivation, Outcome expectations (OE) and Efficacy expectations (EE). According to Bandura (1977; 1993), OE represented a person's judgment that a behaviour will result in a specific outcome; and EE represented an individual's belief that they are able to demonstrate the behaviours required to achieve the outcome. Bandura (1977, 1993) postulated that OE and EE interact to generate and sustain coping behaviours, i.e. actions are determined by: an individual's belief that a behaviour can produce the required outcome; combined with their belief in their ability to perform that behaviour.

Soodak and Podell (1996) found that early models of TE tended to support the existence of two factors (Ashton and Webb, 1982; Gibson and Dembo; 1984) and these claimed to be in

line with Bandura's (1997; 1993) OE and EE. However Woolfolk and Hoy (1990) noted a discrepancy with regards the conceptualisation of cognitive motivation in these studies; and consequently investigated whether OE and EE could be differentiated amongst teachers across three factors. Woolfolk and Hoy (1990) proposed that the three factors included teaching efficacy (TE) and two levels of personal efficacy (PE) pertaining to positive and negative outcomes.

Soodak and Podell (1996) questioned the validity of the positive and negative factors; they suggested that the two factors of PE may instead reflect Bandura's EE and OE components. They modified Gibson and Dembo's (1984) scale to include items relating to 'non-school' influences e.g. heredity and emotionality, and administered to 310 teachers. Factor analysis resulted in three unrelated factors: **PE**, teacher's beliefs relating to their ability to successfully perform actions required to promote learning and manage student behaviour; **TE**, the extent to which teaching can overcome the influence of the home (which included extreme emotional and behavioural behaviours); and **OE**, related to the outcomes of effective teaching behaviours (Soodak and Podell, 1996). Soodak and Podell, (1996) concluded that the distinction between PE and OE reflected that of Bandura's differentiation of EE and OE.

Another proposed model was Tschannen-Moran, Woolfolk Hoy and Hoy's (1998) integrated model of TE that specified the task and context specific nature of TE. Their model weaved two related dimensions similar to general teaching efficacy and personal teaching efficacy, i.e. analysis of teaching task and content, and self perceptions regarding teaching competence. Tschannen-Moran, Woolfolk Hoy and Hoy (1998) proposed that the interaction of these two components resulted in judgements regarding self-efficacy.

2:4:4: Collective efficacy: Concept and research

In the following section I will consider Bandura's perspective on CE, before including information regarding other perspectives, models, measures and implications regarding CE in schools.

2:4:4.a. The concept of collective efficacy

Since we live within social systems not in isolation, we might reasonably assume that it is not possible to assert control over all major aspects of our lives independently of others (Bandura, 1997). Many barriers require people to work together in order to overcome them. The strength of social institutions, organisations and families and the ability to resolve issues and improve lives is reliant upon a sense of collective efficacy (Bandura, 1997).

Bandura, (1997, p. 477) defined collective efficacy as, 'a group's shared belief in its conjoint capabilities to organize and execute courses of action required to produce given levels of attainment'. So the collective efficacy beliefs of a group centre upon its combined capabilities. One of the key facets of efficacy theory is human agency, i.e. an individual's belief that they can work to produce effects. As mentioned previously, personal agency is considered to function within a system of sociocultural influences, and so when considering collective efficacy, it is necessary to extend this theory to incorporate collective agency, defined by Bandura (1997, p 3) as 'peoples' shared beliefs that they can work together to produce effects.'

Group functioning is considered the product of the interactive dynamics of its members. These dynamics are viewed as an 'emergent property' and so are conceivably greater than the sum of the individual qualities and characteristics of the group members (Bandura, 1997). Factors such as the mix of competencies and knowledge of group members, how well the group is led, and the group structure are influential in determining the interactive dynamics. It is possible for group performance to vary on the basis of these factors, along with how well members' efforts and skills are guided (Bandura, 1997).

As with SE beliefs, CE beliefs are regulated according to psychosocial processes; these are activated by CE beliefs and influence how effectively group members work together and the product of their combined efforts. Psychosocial processes are therefore instrumental in shaping how individuals manage/apply their resources, how much effort they invest, the potential they aspire to, their level of persistence in the face of difficulty and determination when undertaking group endeavours (Bandura, 1997).

Schools represent social systems in which staff function collectively rather than in isolation. The CE of those within a school community can vary greatly (Bandura, 1997). It is possible for the CE beliefs of the staff to influence how efficiently and harmoniously the school operates as a social system, (Bandura, 1994). For example, in schools where staff members collectively judge themselves to be capable of promoting achievement, the ethos will foster encouragement, development and success, regardless of the barriers faced by the school population. Conversely, in schools where staff collectively view their capabilities as limited in bringing about academic success, there would be a sense of ineffectuality and hopelessness which would filter to and affect the school population (Bandura, 1994). As one would expect, the sense of CE within a school community can be systematically linked with the outcomes of students (Bandura, 1997; Goddard. Hoy and Woolfolk Hoy, 2000; Parker, Hannah and Topping, 2006).

2:4:4:b. Research around collective efficacy

Goddard *et al*, (2000) highlighted the historical difficulties related to the conceptualisation of TE, but also drew upon the links between TE and the behaviour of the teacher thought to cultivate student outcomes (Allinder, 1994; Ashton and Webb, 1986; Gibson and Dembo, 1984; Meijer and Foster, 1988; Woolfolk and Hoy, 1990). On the basis of these findings, Goddard *et al*, (2000) proposed to extend the construct of TE to an organizational level - collective teacher efficacy.

In order to do so, they grounded their research in Tschannen-Moran *et al*'s, (1998) integrated model of TE, based on Bandura's (1977, 1986, 1997) social cognitive theory. The model was generally based upon the idea of two dimensions, general teaching efficacy (GTE), and personal teaching efficacy (PTE). GTE represented an analysis of the barriers to the teaching against the resources available that facilitate learning. PTE represented an analysis of their capabilities e.g. skills and knowledge against personal weaknesses relevant to the context. Tschannen-Moran *et al*, (1998) propose that the interaction between GTE and PTE form judgements regarding self-efficacy for the immediate task.

In their study, Goddard *et al*, (2000) considered the four sources of efficacy at an organizational level and detailed the design of their measurement for CTE. The CTE scale was based upon the Gibson and Dembo (1984) instrument that was criticised for inconsistency and the assumptions made regarding outcome expectancy (Tschannen-Moran and Woolfolk Hoy, 2001).

The findings, derived from student achievement and demographic data along with teachers' completed CTE scales, demonstrated the dimensions of group competence and task analysis were highly related in schools, thus supporting their model of CE. This stated that analysis of the task and assessment of group competencies together create a sense of CE in school (Goddard *et al*, 2000). Additionally, the findings showed that CTE was positively associated with differences in student attainment between schools. Therefore it was assumed that CTE beliefs can affect the outcomes of students. That being the case, Goddard *et al*, (2000) concluded that the theoretical conceptualisation of TE, grounded in Bandura's (1977; 1986; 1997) social cognitive theory, can be extended to the organizational level.

However, their findings only reflected work undertaken in elementary schools; and so the conclusions made regarding CTE may only be drawn at this level. There are inherent

differences between the organisational structure and ethos within elementary and high schools as pointed out by Kurtz and Knight (2004, p.115), who by organisational analysis, identified elementary schools as 'tightly coupled systems', i.e. highly interdependent. High schools, on the other hand had been labelled as loosely coupled systems by Firestone and Herriott (1982), representing only moderate interdependence within the organisation.

Kurtz and Knight, (2004) undertook research into the relationship between TE, CTE and goal consensus. Their findings suggested that CTE was strongly related to goal consensus, individual TE was related to CTE but TE was not related to goal consensus. This led authors to draw the conclusion that whilst TE, CTE and goal consensus are all related (even if indirectly), by making changes to one, it may be possible to affect change in the others.

The definition of TE used in this study was associated with influencing student performance and outcomes rather than being conceptualised according to Bandura's theory. The definition of CE was not included, although evidence cited from sources (Bandura, 1997; Goddard *et al*, 2000; and Tschannen- Moran *et al*, 1998), suggests the implied model of CTE referred to in the study was grounded in social cognitive theory. Consequently this construct of CTE is less related to outcome expectancy (Pajares, 1997), and therefore does not correspond well with the construct of TE used.

The scales used to gather the views of teachers included the Gibson and Dembo (1984) teacher efficacy scale (TES) which was criticised on the basis that it lacks consistency and encompassed both conceptual and statistical problems, (Tschannen-Moran and Woolfolk Hoy, 2001), and the collective teacher efficacy instrument (Goddard *et al*, 2000), which was based on the flawed TES. As such, findings regarding the relationship between TE and CTE were questionable.

Kurtz and Knight (2004) also had concerns regarding the measurement accuracy of the general teaching efficacy (GTE) strand in Gibson and Dembo's (1984) TES and the CTEI (Goddard, *et al*, 2001). They questioned whether the scales accurately represented and therefore measured the construct of GTE. The goal consensus measurement was also called into question, since Kurtz and Knight (2004) questioned whether teachers' perceptions of goal consensus actually reflected the goals of others in the school. Moreover, this study along with Goddard *et al*'s, (2000) were undertaken in America, and so the viability of the findings across cultures is yet to be proven.

Parker *et al*, (2006) conducted a study regarding the relationship between CTE, socioeconomic status (SES) and pupil attainment in a primary school. The study was set in

Scotland, and while differing from the English educational system, the cultural differences in findings are likely to be less significant than those undertaken in America.

Researchers used the Tschannen-Moran and Barr (2004) Collective Teacher Efficacy scale which was designed following analysis of previous scales (Tschannen-Moran *et al*, 1998). The findings indicated a significant positive relationship between SES and attainment in reading and maths; this was not found to be the case for writing. A significant positive relationship was also found between CTE and reading and writing attainment, but this was not the case for maths. Overall, neither SES nor CTE independently accounted for the variances in attainment (Parker *et al*, 2006); although CTE was found to have a greater impact than SES with regards writing attainment.

The authors went on to focus on one school, which despite having very low SES, had very high CTE beliefs. In this school Parker *et al*, (2006), reported that high quality in-service training, ethos and emphasis on pedagogy were perceived by teachers to be the most important factors relating to student attainment. Subsequently Parker and colleagues (2006) concluded that when the aforementioned factors are in place and act to enhance CTE, the effects of SES on pupil attainment may be lessened (and this may be easier in some subjects than others).

2:5: Organisational change

It is the overriding view within the literature that changing the culture of an organisation is a very difficult task (Fidler, 1990). Some believe it is only possible to influence a culture rather than actually to change it (Fidler, 1990). The concept of organizational culture is not a fixed one. Durrant and Holden (2006) pointed out that the shifting and evolutionary nature of competing perspectives within cultures. This makes them difficult to pinpoint, as different people have different stories and versions of the culture they want to share. Stoll and Fink, (1996) stated that the pace of post-modern society means schools are unable to remain static and that they are either improving or getting worse. Furthermore, schools are susceptible to societal influences because they cannot act in isolation from the wider economical, political, and social environment (Wrigley, 2003).

The importance of open dialogue and collaboration within the process of organisational change was emphasised by Durrant and Holden, (2006). The encouragement and facilitation of trustful dialogue was considered essential in 'unlocking' school culture; conversations regarding the current state of schools, contrasted with their preferred futures, would be a fundamental part of the process (Durrant and Holden, 2006). This approach

would potentially create a role for educational psychologists in cultural change through the process of facilitation, encouragement and by asking probing questions.

Schein, (1992) described three levels essential in understanding school culture: *Artefacts*, i.e. visible structure and procedures within the organization; *Espoused values*, i.e. philosophies and goals of the organization; and *Basic underlying assumption*; namely unconscious beliefs, thoughts, and values. According to Schein (1992), structure lies within the most superficial level of culture (artefacts); and therefore cannot independently change the culture of an organization.

Deal and Kennedy (1988) suggested three factors which emphasise the difficulty involved when working to affect change within organizations. These were: *evident crises*, i.e. the organization is troubled or moving towards trouble, allowing for greater consideration of deep seated change; *attractiveness of change*, i.e. the desirable features and possible outcomes of change must be emphasised; the *strength of the present culture*, i.e. this is proportionate with willingness to change, in other words the weaker the culture the more easily it can be changed.

When working towards organizational change in schools, Fidler, (1990) proposed two sets of circumstances which required different approaches. Firstly, occasions where the present culture is evolved; this involves building on or phasing out aspects of the current culture. Secondly, cases of radical change to the present culture; this involves a major overhaul of key aspects of the current culture. As well as these factors, when considering organizational change, Schein (1992) accentuated the importance of ethics; especially when cultural change is dictated by senior groups (Willmott, 1993).

Schein (1992) also proposed a number of stages of cultural development which are related to the age of the institution. These will be considered in more detail below.

2:5:1: Founding and early growth

Schein (1992) emphasised the importance and influence of leadership during the early stages of cultural development. The following were considered embedding mechanisms, relevant at this stage of development:

- What the leader attends to, i.e. what is regularly monitored and evaluated
- The leader's reaction to crises
- The apparent criteria by which resources are allocated

- The apparent criteria for promotion, recruitment and retirement of organizational members
- Modelling of desired skills and practice in important areas such as teaching; specification of criteria by which rewards may be earned.

While the leader of the organisation is considered integral at this stage of cultural development, it is important that not all expectation for change is placed upon them. Within any organization it is likely there exist functioning sub-cultures, for example groups such as teaching or support staff (Torrington and Weightman, 1989). It is reportedly possible to affect organisational change through the expansion of a sub-culture in support of the preferred organisational direction (Fidler, 1990).

In addition to the embedding criteria, presented above, Schein (1992) also cited secondary mechanisms, which act to reinforce the culture of the organization. These included: organisational systems, organisational rituals, organisational structure, the history surrounding the organisation e.g. stories, myths and legends, the design of the physical environment, and formal statements e.g. organisational philosophy/mission statements (Schein, 1992). It is interesting that formal statements e.g. policies featured lastly on Schein's (1992) list, since it is usually the method most employed by schools when trying to implement change (Torrington and Weightman, 1989). Durrant and Holden (2006) supported this view by stressing the significance of relationships and learning within school cultures rather than just the structures and systems.

2:5:2: Change in midlife

The longer an organisation has been established, the harder it is to change its culture (Fidler, 1990). At this stage, cultural change can be attempted in a number of ways. Schein (1992) has suggested:

- The systemic promotion of a suitable sub-culture, i.e. spreading a sub-culture by elevating its central tenets across the organisation
- Initiating a parallel learning system within the organisation, i.e. creating the opportunity to trial new ways of operating as an organisation
- Technological seduction, i.e. rolling out new physiological or human (training programmes) technology to emphasise the newness of principles and methods.

2:5:3: Change in maturity

This is the most difficult stage in which to make changes (Fidler, 1990; Schein, 1992). At this point, suggestions for cultural change include:

- Infusion of outsiders in leadership/senior posts, e.g. the introduction of Super Heads to struggling schools
- Scandal; where great contrast between espoused culture and culture in use, is exposed
- Coercive persuasion, compelling individuals to work differently
- Turnarounds, either involving a strong visionary leader with a new message, or a fuzzy model where there is clear determination to change but, as yet, no solutions have been reached regarding how to affect it (Schein, 1992).

Affecting change in education is a two-sided coin. On one-hand there are the dynamic, positive directives for change and improvement; the other reflects unease and anxiety which can impact upon morale, performance and confidence (Durrant and Holden, 2006). Negative outcomes such as diminished self-esteem tend to be associated with top-down approaches to change; centrally controlled change has much less detrimental emotional impact on organisational members (Durrant and Holden, 2006). Harris and Lambert (2003) proposed that the role of leadership in managing change includes the ability to build capacity, i.e. trust, relationships, and a sense of community. Joint working is required to form professional learning communities, i.e. network and team working towards leadership capacity throughout school. Responsibility should be shared and owned by the community (Durrant and Holden, 2006) which links with the recommendations made by Schein (1992).

Top-down approaches to change are considered less effective, because they invest in systems rather than people and outcomes rather than the process of change (Durrant and Holden, 2006). Consequently, culture should be prioritised over systems, change should incorporate norms, values and beliefs, and collaborative practices designed to meet the needs of the learners rather than outdated hierarchical systems (Durrant and Holden, 2006).

This approach links with my study by working in collaboration with the whole school community, to better understand the beliefs and values within. As such I hope to generate small scale, school driven change within the community; with a focus on enhancing beliefs in relation to specific areas of practice (Fullan and Hargreaves, 1992). In the section below I will provide more information regarding how the study took shape and the objectives I aimed to achieve.

2:6: My Study: Focus and Formulation of research questions

There is a great deal of research (however confused or misrepresentative) regarding teacher efficacy and student outcomes. Yet there is hardly any that I am aware of that considers the efficacy beliefs of other school community members. Teachers have the power to influence the outcomes of the students they teach; but so do those who work more closely to support their learning (Alborz *et al*, 2009), or contribute to the school ethos as a whole. My study was designed to explore the efficacy beliefs of the whole school community.

I wanted to work towards enhancing the efficacy beliefs of participants as, 'a strong sense of efficacy enhances human accomplishment and personal well-being in many ways' (Bandura, 1994, p71). Positive efficacy beliefs can empower individuals to view difficult tasks as challenges to be tackled with perseverance rather than fear or anxiety; and can enable increased and sustained efforts to master them. An efficacious outlook can result in greater perceived control over difficult situations; and failure would consequently be attributed to generative, flexible factors including knowledge or skill acquisition rather than fixed, defeatist ideas. Moreover, strong efficacy beliefs can result in reduced feelings of stress and related illnesses and enhanced personal achievement and feelings of success (Bandura, 1994).

Given the emphasis on enhancing well-being, and the fact that social realities can be strewn with difficulty and setbacks, PP seemed like an appropriate approach to use in order to enhance efficacy beliefs within the school community. By emphasising 'the good things in life' as endorsed by Positive Psychologists (Seligman *et al*, 2005); and by the intervention selected for the study I hoped that the process of positive reflection would enhance and support positive judgements and self-perceptions regarding capabilities.

The question formulation was based upon the assertion that it may be possible to enhance the efficacy beliefs of staff within the school community. I intended to consider this at a holistic and specific level during the study, i.e. through comparison of the totalled quantitative data representing efficacy beliefs and through comparison of the data regarding efficacy beliefs re: the specified domains highlighted by participants. This investigation would work towards answering my first two questions, 'Can the efficacy beliefs of school staff be enhanced through the application of a positive psychology intervention?' and 'Are there significant enhancements relating to the specific domains identified as less efficacious by the school staff?' Qualitative data collected through focus groups would also act to support this investigation.

The final question, 'Does role impact upon capacity to alter efficacy beliefs?' came in part from my curiosity in relation to broadening the concept across the school community and was

further informed when reading literature pertaining to variables which potentially hinder development of efficacy beliefs (Henson, 2001; Knoblauch and Woolfolk Hoy, 2008; and Woolfolk Hoy and Burke Spero, 2005). I had hoped to also investigate experience along with role. However due to descriptive information omitted during data collection, this was not possible.

I intended my research to contribute to current gaps in knowledge regarding: Application of PP in schools and its effectiveness, using PP in the UK, working to enhance efficacy beliefs through the application of PP, and working to enhance efficacy beliefs across a whole school community.

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Chapter 3: Methodology

In this chapter I will provide information regarding the methodology employed throughout my research study along with the specific method used. Given the nature of this chapter, some aspects that have been introduced here will be explored in detail in subsequent chapters. In these instances there will be clear signposting to this additional information.

3:1: Research Questions

The study investigated the impact of Positive Psychology on the efficacy beliefs of a whole school staff team. The questions addressed during the course of the research process are as follows:

1. Can the efficacy beliefs of school staff be enhanced through the application of a Positive Psychology intervention?
2. Are there significant enhancements relating to the specific domains identified as less efficacious by the school staff?
3. Does role impact upon capacity to alter efficacy beliefs?

3:2: Research Paradigm and Design

To investigate the impact of Positive Psychology (PP) on efficacy beliefs a between subjects quasi-experimental design was employed. Quasi experimental designs are intended to benefit from, as much as possible, the advantages of true experimental designs when, as in my case, controlled laboratory conditions are unsuitable or unachievable (Muijs, 2004).

The distinguishing factor between experimental and quasi-experimental designs is the allocation of participants to groups. In quasi-experimental designs, randomisation is not possible. In my study the groups were decided by the school settings willing to participate in the research study. Consequently it is important that the comparison group should match the experimental group as much as possible in order to retain the advantages of an experimental design; this will be explored more in the section 3:6 below.

Quasi-experimental designs are also well suited to exploring the impact of interventions within education i.e. the intervention aimed at enhancing the self-efficacy beliefs of staff members within a primary school community. However, the findings may be influenced by a

number of variables; which should be considered when establishing causality, these may include: socio-economic status, gender, ethnicity, school leadership, school climate and other interventions taking place in school at the time of the study (Muijs 2004).

A pre-intervention/post-intervention design was employed. This involved the use of experimental and comparison groups to measure the impact of PP on efficacy beliefs. Within the experimental group the independent variable, i.e. PP intervention, was present; this was not the case in the comparison school. This provided a baseline comparison measure as the dependent variables were not manipulated in any way. In both cases the dependent variable, efficacy beliefs, were measured twice. In the experimental group this occurred prior to and following the implementation of the independent variable.

One limitation of this design is that participants exposed to a pre-intervention measure, may be aware of how to answer on the post-intervention measure, to appear they had made progress or lack thereof, i.e. participants may be susceptible to practice effects (Coolican, 1999). In addition, when using a quasi-experimental design there is a chance of bias given the lack of randomisation. There may also be additional factors specific to the culture of the school settings which may influence the findings (Muijs, 2004). However by employing this method I have the best chance of establishing the effectiveness of the PP intervention and by using experimental and comparison groups that are sufficiently matched it is possible to determine whether the intervention has been successful.

I sought to counteract these limitations somewhat by complementing the statistical information with qualitative data elicited using focus groups. Therefore, I was able to benefit from the pragmatic advantages of a mixed methods design, which allowed me to obtain further insight into the research areas; specifically the efficacy beliefs in relation to the identified domains. Moreover, the major advantage of employing a quasi-experimental design rather than pure experimental, is that as the research is taking place within the natural environment it will have higher ecological validity (Muijs, 2004).

3:2:1: Using a Mixed Methods Design

There has been much debate regarding whether qualitative and quantitative approaches can effectively be merged. The difference between the two is often perceived as inherent, and this proposal has led to the notion of paradigm wars and the opinion that the two are, by large, incompatible (Muijs, 2004). These debates have been fuelled by the conflicting epistemologies underpinning qualitative and quantitative research methods. However, whilst some suggest that the two could in no way be successfully combined, others acknowledge

the different epistemological and ontological underpinnings and purport that there is value in bringing them together (Ritchie, 2003).

Mixed methodologies have resulted from the ongoing discussion and criticism regarding the use of either qualitative or quantitative approaches. Mixed methods or the 'third methodological movement' as described by Tashakkori and Teddlie, (2003) have provided a practical way of combining the strengths from both paradigms. Mixed methods provide a flexible approach whereby the design of the study is determined by what one wants to investigate, rather than it being shaped by a pre-determined world view, i.e. the researcher is able to consider both the breadth and depth of meaning and causality (Muijs, 2004).

Qualitative and quantitative approaches contribute very differently to research. For example, in this study, qualitative data were used to consider the nature of efficacy beliefs; how or why these beliefs may exist and what kind of approach may be most helpful in enhancing efficacy beliefs of staff within the school community. Quantitative data will help explore the levels of efficacy before and after the intervention, the efficacy levels amongst the staff team and self-efficacy levels in relation to the themes identified during the planning stage. So the objectives and the product of both paradigms are considerably different – but complementary, and it is for this reason that combining the two is beneficial (Ritchie, 2003).

There is often a need to investigate both the number and nature of a concept, for example when it is considered too complex to be captured fully using statistical analysis. In instances such as these, qualitative approaches are employed to develop a greater depth or further understanding of the concept, (Ritchie, 2003). As with my study, qualitative and quantitative approaches have been used to explore the same concept, however each approach has produced a different way of considering the topic, i.e. efficacy beliefs within the staff team; and has considered them on different levels, i.e. structural and agential. Therefore, the outputs will not mirror one another, but will extend and inform understanding in a way that neither paradigm is independently capable.

This is known as the compensation approach to using qualitative and quantitative methods in conjunction (see section 1:4:1). By focusing on both structure and agency it is possible to account more effectively for the entirety of social experience.

3:3: Ethical Considerations

Throughout the research, participants were reminded of the voluntary nature of their contribution, and were given the right to withdraw at any time (British Psychological Society,

2006). All data collected was stored securely and anonymised so that no names appeared within the research. The Head Teachers were fully briefed regarding the nature and aims of the study and were subsequently able to exclude themselves from the sampling process.

Once the groups were selected the Head Teachers of both schools were informed of how I intended to progress with the research, and how I envisaged their roles. At this stage I was open to negotiation, and allowed for a degree of flexibility within my proposals.

Moreover, I ensured participants fully understood and were content with their roles in the study as either the comparison or experimental group. I offered the comparison school the opportunity to engage in the intervention following the completion of the study should it provide evidence of a significant difference in efficacy beliefs (and had this authorised by a Senior Educational Psychologist at the Educational Psychology Service to ensure this would be feasible).

3:3:1: Ethical considerations in relation to the Questionnaire

When designing the questionnaires I considered the ethical implications at length and subsequently included a number of measures to ensure all ethical aspects were accounted for, especially confidentiality.

When recruiting participants within the school samples, the Head Teachers and I identified an ideal sample, i.e. those to whom the study would be relevant (see section 3:4). Following these discussions the groups were addressed during team meetings to raise awareness of the study, the general concepts, and participant involvement.

The questionnaire coversheet (Denscombe, 1998; De Vaus, 2002) contained details regarding the purpose of the study (and questionnaire) and clarified unfamiliar terms e.g. *self-efficacy*. Confidentiality arrangements were reviewed, and the voluntary nature of participation and right to withdraw were emphasised and a section expressing thanks was included (BPS, 2006). The coversheet also included the completion date, and how questionnaires should be returned, along with contact details to enable participants to ask any questions which may arise during the course of their participation (De Vaus, 2002) (Appendix 2).

To enable easy return, whilst retaining confidentiality, a number of options were made available to participants. Firstly, sealed boxes were placed in both sample schools for the duration of the completion period. This enabled participants to post their completed forms

without the possibility of them being read, removed, or tampered with. Secondly, stamped addressed envelopes were given to contacts in both schools; enabling participants to complete their questionnaires, secure them in sealed envelopes and post them directly to me at my office address. Lastly, a large addressed, sealable envelope was given to the school contacts in case of any late returns. This could be posted to my office address or passed to me in person during my visits. Overall the staff preferred the ballot-box option, although I did receive three questionnaires via post, the reasons for which were given as 'late response' rather than preference.

The descriptive information sheet attached to the pre-intervention questionnaire provided the opportunity to use a pseudonym or password rather than using their name, thus reducing anxiety. Space was allocated to give each questionnaire a reference code; once linked by code with the questionnaire, the descriptive information was separated and stored securely away from responses, thus ensuring that it would not be possible to trace recorded views to participants.

Instructions were provided to clarify what participants were asked to do. The instructions were clearly highlighted, worded simply, and presented in bullet-point form to avoid confusion amongst participants. Also included in the instruction section was a bulleted point informing participants that if they wanted to include more information or expand on any of their recorded views they were able to do so in the section labelled '*Any other comments?*' The inclusion of this option enabled participants to express themselves fully, and therefore feel content regarding the information provided.

3:3:2: Ethical considerations when conducting focus groups

When undertaking the FGs, participants were selected randomly using a mixture of stratified and opportunity sampling (see 3:4.). I ensured the environment provided for the FGs was suitably confidential and that those participating were comfortable in the surroundings. Informed consent was established following the emphasis: of ground rules highlighting the confidentiality of the session, that it was a safe forum in which to voice opinion and that there would be no repercussions following the session. Participants were also informed that the data would be stored confidentially, anonymised and the recorded data would be deleted following transcription. The interactional nature of the focus group was emphasised and I reminded participants that when others were speaking, they should not be interrupted.

A sign-in sheet was provided, offering a written recap of the study, an explanation of the FG procedure, and the data handling process. Furthermore, the questions were made available

to participants at the start of the session, so that there were no unexpected and unnerving scenarios, and to ensure they were fully informed before giving their consent. Participants were also verbally reminded of their right to withdraw from the process at any time (BPS, 2006).

3:3:3: *Ethical considerations: Debriefing procedure*

Following the completion of the study, both the comparison and experimental schools were debriefed and informed of the research findings. This involved a brief presentation of findings to the participants in the comparison school, and a detailed presentation at the experimental school's team meeting. During this presentation, the aims of the study were reiterated, followed by insight into the findings. Particular care was taken to present the qualitative findings in a sensitive way, as much of the data (especially that of pre-intervention focus group), was quite negative regarding school systems.

Concerns were highlighted e.g. issues regarding communication and the level of support; and small group consultations took place. During this session, a number of ideas and possible solutions to the existing issues were generated by the participants and collated by the Head Teacher. Following this, a whole group discussion regarding the benefits of thinking more positively ensued, and the significant increase in efficacy scores following the intervention was emphasised. The Head Teacher and Well-being Co-ordinator agreed to review the solutions generated during the session, and to discuss approaches to develop a more explicitly positive focus/ethos within school.

Participants in both conditions were also provided with contact details that would enable them to request further debriefing or access to the completed thesis.

3:4: Sampling Framework

During the research a purposeful and stratified sample was used (Muijs, 2004). As I wanted to conduct my research within a whole school context, the sample was sourced from the primary schools allocated to me by my employers in September 2008. Within the allocated patch, I had four mainstream primary schools that qualified as appropriate samples according to the design. Before selecting the sample I spoke with the Head Teachers of the four schools to ensure they would be willing to be included in the study, as either the experimental or comparison school, should they be selected. If the Head Teachers had declined my research proposal I had intended to remove them from the random selection process. Once assurances were given, the names of all four schools were written on pieces

of paper, folded evenly and placed into a bag. One of my colleagues was asked to draw two pieces of paper from the bag. It was pre-decided that the first school to be drawn would constitute the experimental school and the second would be the comparison. From this point onwards the schools provided a cluster group, consisting of a number of different sub-groups (Muijs, 2004; Coolican, 1999).

Once the samples had been named I informed both Head Teachers of the research paradigm; research questions, and how relevant the study may be to the staff groups within school. Following this dialogue it was agreed that the sample would consist of:

- Senior Leaders Team
- Teaching staff
- Non-teaching staff/support assistants
- Clerical staff.

As mentioned previously I had hoped to adopt a whole-school approach to the study. However following the discussions with the Head Teachers, we agreed that the study might lack relevance for a number of school staff, these included:

- Welfare staff
- Kitchen staff
- Caretakers.

Consequently these groups were excluded from the study.

Both the comparison and experimental schools exceeded 30 participants. The sample size was therefore adequate to enable the statistical analysis of the findings, as intended as part of the mixed methods design (Coolican 1999).

The nature of the design meant all participants were included in the survey process that generated the quantitative data. However, in order to elicit qualitative data, a smaller representative group of participants was required to take part in a focus group. This called for stratified sampling techniques, where groups within the whole sample were identified, (Muijs, 2004; Coolican, 1999), and participants recruited on the basis of these groups, i.e. SLT, teaching staff, non-teaching support staff and clerical staff. Whilst I was able to ascertain the groups that I would like to constitute the smaller focus group sample, it was not always possible to ensure all groups were represented within the scheduled focus groups. This was due to a combination of workload, timetabling, staff numbers and the desire to participate. Consequently, within the randomly selected school sample, opportunity/convenience sampling was also employed when recruiting participants for the focus group processes (Muijs, 2004; Coolican, 1999).

3:5: Role of the Researcher

As researcher, I played an active role throughout my study. The main reason I decided to use schools from my allocated patch was the existing positive relationships, which could be utilised and enhanced during the study.

Following the planning and development of the questionnaire the actual administration process involved very little contact with participants. However, by conducting the focus groups (FGs) and delivering the PP presentation personally, I hoped to gain useful insight into the efficacy beliefs of the staff team, and the potential influence of the intervention in shaping these. During the FG it was possible to prompt participants to expand their answers when necessary; whilst ensuring their views and beliefs were properly perceived through the process of active listening; reframing answers; and checking that my interpretation of their discourse accurately represented what they intended it to.

As Local Authority work was undertaken during the course of the research study, I was able to arrange an informal discussion with a selection of staff to develop an understanding of their experiences of the PP intervention.

Subsequently I had no doubt that the active and involved role I adopted during my study would impact upon the research findings, and I will be exploring this in detail in my *Discussion* chapter (6:3:3).

3:6: Context and location of study

The study was undertaken within a small Local Authority. Two mainstream primary schools were randomly selected and recruited to participate in the study. The planning of the research took place during the early stages of the academic year in 2008 and the timetable included in Appendix 3 indicates when the specific aspects of the study were undertaken.

Flexibility was necessary to accommodate the needs of the schools, along with carefully planning around school and bank holidays. It was also important to complete the data collection before the end of the academic year due to the potential confounding variables this change may have generated in relation to specific self-efficacy domains; e.g. as efficacy beliefs are context specific, a new group of children to teach, or a new individual to support would undoubtedly impact upon the findings.

As the schools were randomly selected there were some discrepancies regarding population and context. These will be further outlined below:

3:6:1: *Experimental school context*

The experimental school was a Community Primary School. It had a nursery, a reception, and year 1- 6 classes. The age of the student population ranged from 3 to 11 years. The Ofsted inspection conducted in 2006 described the school as larger than average. At the time the study was undertaken, the student population had increased to 302.

The catchment area for the school dictated that almost all students on role were from Minority Ethnic backgrounds, and for the greater part of the school population English was an additional language. The school was set in an area of social and economic disadvantage; subsequently there were a large number of children in receipt of free school meals. Moreover, the number of students with learning difficulties was also reported to be above average, so there was a high proportion of staff employed to support those students with Special Educational Needs.

A new Head Teacher appointed in 2005 aspired to improve achievement within the school. In 2008 an extensive building refurbishment took place and the school community is very proud of their new learning environment. The school also adopts a topic-based approach to curriculum and actively encourages contact with parents and carers.

Of the 302 students on roll, 19 (6.3%) were placed at School Action Plus level of the Special Educational Needs Code of Practice, had Statements of Special Educational Need or a locally designed form of statutory assessment from which additional funding was allocated. In addition, 37 (12.3%) students were on the code of practice at School Action level.

Table 1 overleaf indicates the grades awarded by Ofsted following their most recent inspection in 2006.

Table 1: Outcome of Ofsted inspection 2006 for the Experimental school

Inspection Criteria	Grade
Overall effectiveness of the school	3 – Satisfactory
Achievement and standards	3 – Satisfactory
Personal development and well being	2 – Good
Teaching and learning	3 – Satisfactory
Curriculum and other activities	3 – Satisfactory
Core guidance and support	3 – Satisfactory
Leadership and management	3 – Satisfactory

Table 2 below indicates the percentage of students' Key Stage 2 results for the core subjects achieved at level 4 and above in 2008.

Table 2: 2008 KS2 results: Level 4 and above

Core subject	% Achieving at level 4 and above
English	64%
Maths	74%
Science	67%

The staff population at the school consisted of the following: five senior leaders, 12 teachers, 16 non-teaching support assistants, and two clerical staff.

3:6:2: Comparison school context

The comparison school was a Roman Catholic Primary School within the same Local Authority. This also had a nursery, reception, and year 1- 6 classes. The age of the student population here also ranged from three to eleven years.

The comparison school was also described by Ofsted as larger than average, with 451 students on roll. The school population was described as being from mixed socio-economic backgrounds; however unlike the experimental school, the percentage of students receiving free school meals was below the national average.

The majority of students on roll were White British, with only 2.5% experiencing English as an additional language. The number of students with Special Educational Needs was reported to be above average, as was the case in the experimental school. On roll at the time of the inspection there were four (5.8%) students supported at the Statement or School Action Plus level of the Special Educational Needs Code of Practice and 16 (23.2%) students

supported at the School Action level. Whilst these figures were reportedly above the national average, when compared with the experimental school these numbers were substantially lower. See Table 3 below.

Table 3: SEN figures for experimental and comparison schools

	Statement/School Action Plus	School Action
Experimental school	19 students	37 students
Comparison school	4 students	16 students

Furthermore, whilst the experimental school underwent refurbishment in 2008, the comparison school moved to a new site providing them with a fully modernised and creative learning environment.

The findings from the comparison school's most recent Ofsted inspection undertaken in 2008 can be found in Table 4 below. It is possible to see that the grades awarded to the comparison school exceed those awarded to the experimental school; however some of the inspection criteria did differ at the time of inspection.

Table 4: Outcome of Ofsted inspection 2008 for the Comparison School

Inspection Criteria	Grade
Overall effectiveness of the school	2 – Good
Achievement and standards	2 – Good
Personal development and well being	1 – Outstanding
Quality of provision	2 – Good
Foundation stage	2 – Good
Leadership and support	2 – Good
Leadership and management	3 – Satisfactory

It is also prudent to consider the time at which the inspections took place and the possible factors that may have impacted upon the overall inspection figures. In the experimental school, the Head Teacher had only recently been appointed, and may not have had time to implement change or plans for improvement; also the refurbishment of the school environment had not yet taken place. Whereas, when the comparison school was inspected, their Head Teacher was established and they had moved to the newly built modernised, site that may also have had some bearing on the findings.

Table 5 below indicates the percentage of students' Key Stage 2 results for the core subjects achieved at level 4 and above in the comparison school in 2008.

Table 5: 2008 KS2 results: Level 4 and above

Core subject	% Achieving at level 4 and above
English	93%
Maths	88%
Science	91%

Compared to the experimental school, the achievement levels in the comparison school were also somewhat higher. This could be due to a number of factors including the potential language barrier experienced by the majority of students in the experimental school; this may go some way to explaining why the English and Science scores were lower than the Maths. In addition it may also be the case that some of the curriculum may be culturally specific and therefore more difficult to access for those students with EAL.

The staff population in the comparison school included: five senior leaders, 15 teachers, 17 non-teaching support assistants, and three members of clerical staff. Therefore the comparison school staff team was larger than the experimental. In order to match the participants and to achieve the desired sample size a number of the comparison school staff population were excluded from the study by means of random selection according to their roles within school.

3:7: Procedure for data gathering

The study was undertaken in a number of phases. To enable the reader to progress more easily through the stages, I have presented phases under separate sub-headings, to hopefully clarify the process involved.

3:7:1: Phase 1: Planning stage

Following sample selection, I arranged to meet the Head Teacher of the school assigned to the experimental category. During the meeting I conducted a semi-structured interview to explore the possible focus of the study, i.e. identifying the domain(s) in which participants' efficacy beliefs would be measured. During this phase, a focus group (FG) of randomly selected staff was undertaken. The questions used in the semi-structured interview were adapted where necessary, and provided the framework for the FG. Participants in the FG consisted of:

- One member SLT
- Three teaching staff
- One member of non-teaching support staff

The main aim of FGs was to understand and explain the meanings, beliefs and cultures influencing the feelings, attitudes and behaviours of individuals (Rabiee, 2004). I decided to use FGs to provide enhanced meaning to the questionnaire, by examining the reasons and thinking behind participants' answers (Heary and Hennessy, 2002). This follows an essentialist framework assuming participants have their own ideas, opinions, and understanding of their efficacy beliefs, unlike a constructionist framework which assumes cognitions are formed during collaborative processes such as social interactions (Wilkinson, 2003).

I chose FGs rather than individual interviews for a number of reasons. Firstly, the nature and range of data achieved through the interactional process generated through FGs is often richer than those obtained through individual interviews (Rabiee, 2004). Secondly, FGs would allow me to view the world from the participants' perspective therefore increasing the ecological validity of the data (Willig, 2001). Finally the time constraints made FGs an efficient tool in obtaining the views of many rather than a few.

During the meeting with the Head Teacher, information was recorded in writing according to the answers given. I made sure to rephrase and repeat back the information to the Head Teacher, to ensure I fully understood, and was correctly representing his views. During the FGs due to the increased number of opinions and limited time frame (one hour), I used a digital recording device so as not to miss any information. I also noted significant points, which I was able to refer back to when developing the questions. I transcribed the digitally recorded information, and thematic analysis (Attride-Stirling, 2001; Braun and Clarke, 2006) was used as a method of identifying key themes relating to efficacy beliefs as highlighted by participants during this planning stage (see Appendix 4).

Following the development of themes the questionnaire development began. This was intended to measure self and collective efficacy beliefs in relation to the themes (Figure 1 see p 70).

The finished questionnaire was piloted with members of Senior Leadership Team (SLT), teaching, support and administrative staff from a local primary school to check the readability of the questions, how easily they could be understood, if others perceived the questions to be asking what I expected them to; and that the questions were relevant to all groups

included in the study. Following feedback from the pilot group, amendments were made and the questionnaire reviewed for readability. The cover page was designed according to recommendations by Denscombe, (1998) and attached along with the descriptive participant information sheet (See Appendix 2).

3:7:2: Phase 2: Pre-intervention

Both experimental and comparison schools were notified in writing of when the questionnaires would be made available to them, and when the completed questionnaires would be collected. I made arrangements in both schools for a named contact to be responsible for receiving, administering and collecting the completed questionnaires.

Both schools received a sealed box to be situated in a designated area e.g. the staffroom or school office; participants were asked to post their completed questionnaires in the box to maintain confidentiality. Other return methods were available to participants (see section 3:3:1).

Questionnaires were delivered by hand to the comparison and experimental schools as agreed. Once completed, they were collected by hand to ensure the boxes remained sealed, and confidentiality was ensured. The questionnaires were coded for my reference so that pre-intervention and post-intervention questionnaires could be paired; and once gathered they were scored according to the numeric values selected by the participants on the Likert scale provided (De Vaus, 2002).

A second FG was arranged with the experimental school, using the sampling framework outlined in section 3:4. This was to provide more in-depth qualitative information to enrich the quantitative data produced by the questionnaires. Five participants were included in the FG, to obtain a range of views, whilst conforming to recommendations not to exceed six participants per group (Heary and Hennessy, 2002; Krueger and Casey, 2000; Willig, 2001).

Participants included:

- One member of SLT
- One member of teaching staff
- Three non-teaching support staff

FG participants were presented with a written preamble and sign in sheet, (included in Appendix, 5 also see sections 3:8:3/3:8:4 for more information); I reintroduced myself and thanked participants for their involvement. I checked with participants that they had previously completed the questionnaire, and emphasised that I was hoping to gather more

detailed information to complementing the numeric data. Ground rules were suggested and agreed before commencing with the questioning process.

The questions used during the FG were based upon the key themes that informed the questionnaire (Figure 1). The questions were kept general to stimulate maximum discussion. The group were posed each question in turn and each group member was prompted to contribute to the discussion that ensued. The FG data was analysed thematically (Attride-Stirling, 2001; Braun and Clarke, 2006) before being collated with questionnaire data, providing a baseline measure of efficacy in relation to the agreed domains.

3:7:3: Phase 3: Intervention

Phase 3 involved the experimental school only. Following the collection of the baseline data, a PowerPoint presentation outlining the history and theory underpinning PP (Appendix 6) was prepared and delivered. Following the presentation, the staff were informed about why PP was selected as the focus of the study; and the intervention process was explained. As the intervention period was limited to one week; I wanted to provide participants with an opportunity to reflect on the presentation and to practice positive thinking prior to implementing the intervention. Subsequently, in the fortnight prior to the commencement of the intervention, participants were encouraged to engage in some preparatory activities, which included reframing their thinking to consider positive outcomes rather than negative; engaging in positive dialogues with their colleagues; and asking one another about what had gone well and why.

I returned to the experimental school a fortnight after the presentation. During this time, my presence in school had continued to prompt participants to engage in the activities outlined above. The intervention that I had decided to use was 'three good things in life' (Seligman *et al*, 2005) (see sections 2:1:4:a and 3:8:2); participants had agreed to keep a written record of their reflections, as a way of ensuring they would take time to engage with the process; and so I would be able to review the consistency with which the intervention had been implemented.

Out of a sample of 35 participants, seven booklets were returned (20%). This may have indicated only 20% of participants completed the intervention; however, it is possible, some may have participated but felt uncomfortable about their information being reviewed. I tried to overcome this obstacle by assuring participants that information would remain confidential, and once analysis had taken place, they could have their booklets returned to them. Potentially, this may not have provided enough security for some individuals.

In other instances, participants may have thought about and reflected upon three good things as specified by the intervention instructions, but opted not to write them down. This may have been due to time pressures or workload, but participants had highlighted that new initiatives are seen as somewhat of an inconvenience, 'you've got so much other stuff to do, it just gets put back'. Therefore, participants may have considered thinking through, rather than recording their three good things and causal explanations, less of an inconvenience to them. However, it is not reliable to conclude that 80% of participants did not take part in the intervention on the basis that they did not return their information.

I was further able to explore the usefulness of the PP intervention and participants' reflections of the process through conversations with a group of staff members on an arranged visit to the school (See section 4:1).

3:7:4: Phase 4: Post-intervention

The post-intervention questionnaires were distributed to both the experimental and comparison schools. Following completion and collection of these a FG of randomly selected experimental participants was conducted, participants included:

- One member of SLT
- One member of teaching staff
- One member of non-teaching support staff

The quantitative and qualitative data were then analysed using statistical and thematic analysis (Attride-Stirling, 2001; Braun and Clarke, 2006).

3:8: Instruments

There were a number of instruments used during the study. I will explore these individually and in turn, so as to provide the reader with a clear understanding of what was used and why.

3:8:1: Questionnaire:

For the pre- and post-intervention data collection method a questionnaire was designed in order to elicit the efficacy beliefs of the sample (Appendix 2). I decided a self-completion questionnaire would be an appropriate research tool as the numbers of participants in the

sample were reasonably large, and for that reason I required a relatively straightforward approach to obtaining and analysing beliefs (Robson, 2002).

Given the potentially sensitive nature of the questions, a self-administered survey would also allow for open and honest responses due to the anonymity they afford. Moreover, on a practical level, the questionnaires were quick to administer, low cost, and due to the positive relationships I had with the schools, I expected the good return rate (Robson, 2002). Other measures were also taken in an attempt to improve response rates.

The length of the questionnaire was restricted to one page of A4 paper so as to be perceived as manageable for participants to engage in the completion process (De Vaus, 2002).

Time was taken to ensure that the questions were not repetitive; wording was monitored to ensure that whilst the question content was sensitive it was not intrusive. Piloting ensured the questions were easy to understand and were considered relevant by all groups included in the sample (De Vaus, 2002). Pre-administrative contact was also made with the experimental and comparison schools, to introduce my research and to request participation in the hopes of improving response rate (De Vaus, 2002).

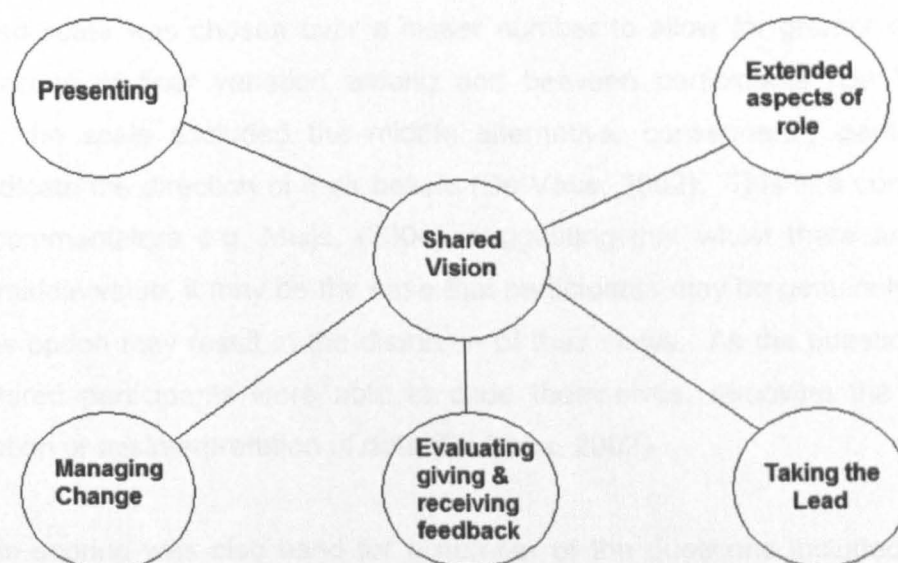
As the PP movement embraced the positivist paradigm, I wanted to generate empirical data, which could be statistically analysed, and the use of questionnaires enabled me to do so. Consideration was given to the instruments used in efficacy research. However items on these did not extend to the population I was working with, although examples of wording were used in the question design.

The questionnaire consisted of 14 closed statements which required participants to select the coded response which best reflected their efficacy belief in relation to a statement. An open-ended question was included, allowing participants to offer 'any other comments'. The inclusion of this question was designed to gain a qualitative response representative of the true beliefs of the participants (Hayes, 2000). However no participants opted to complete this question.

The questions were developed following a semi-structured interview with the head teacher and a randomly selected focus group from within the experimental school (Appendix 7). This was to inform the focus of the study by identifying the key issues, (Denscombe, 1998) i.e. within the school community, which areas provoked particularly negative efficacy beliefs. Following the thematic analysis of the planning-phase focus group data (See sections 3:9:3/3:9:4 and Appendix 4) (Braun and Clarke, 2006; Attride-Stirling, 2001), and after giving

consideration to the Head Teacher's ideas relating to negative efficacy beliefs, I created a set of questions which reflected the main useable themes generated through this process. See Figure 1 below.

Figure 1: Main themes derived through thematic analysis of focus group data (see sections 3:7:1 and 3:8:3)



Following ethical considerations I designed a cover page (Appendix 2) to the questionnaire which provided background information to the study; thus enabling participants to make informed decisions regarding their involvement in the research process (Denscombe, 1998). The information outlined by the cover page included details about the sponsor of the research, i.e. the fact it was an individual study contributing to my doctoral training; the purpose of the questionnaire, i.e. to investigate efficacy beliefs of school staff (with a definition of self and collective efficacy to ensure understanding); details of the confidentiality arrangements, i.e. the fact that all responses would be kept anonymous throughout the study; the voluntary nature of their participation, and thanks for agreeing to participate (Denscombe, 1998).

The cover page also included instructions of how to complete the questionnaire, and guided participants' attention to the opportunity to provide qualitative information in support of their coded answers (Denscombe, 1998). Attached to the back of the questionnaire was a descriptive information sheet for the participants to provide their personal information (Appendix 2); and which reiterated the confidential nature of the information.

The questionnaire was piloted (De Vaus, 2002) on a stratified sample from another primary school, including staff from each of the groups to be included in the study. This was to ensure the readability and relevance of the questions. Following feedback, the questionnaire

was amended accordingly and distributed to all participants in both experimental and comparison schools to ensure a high reliability of response, (Robson, 2002) whilst reducing the scope for interpersonal factors, (Denscombe, 1998).

Likert rating scales were used for the 14 questions, whereby polarised beliefs were placed at opposed ends of a numeric scale ranging from 1-8. As suggested by De Vaus (2002), an 8-point balanced scale was chosen over a lesser number to allow for greater discrimination and the detection of finer variation among and between participants (De Vaus, 2002). Furthermore, the scale excluded the middle alternative; consequently participants were obliged to indicate the direction of their beliefs (De Vaus, 2002). This is a contended issue with some commentators e.g. Muijs, (2004), suggesting that whilst there are benefits to excluding a middle value, it may be the case that participants may be genuinely neutral, and removing this option may result in the distortion of their views. As the questionnaires were self-administered participants were able to code themselves, removing the possibility of misclassification or misinterpretation of data (De Vaus, 2002).

Reverse item scoring was also used for a number of the questions included, (Carifio and Perla, 2007) i.e. the direction of the questions was reversed; to ensure participants attended properly to them; thus improving the questionnaire's validity and preventing acquiescent responses (De Vaus, 2002).

3:8:2: *Intervention Recording Booklet:*

The experimental school received a PP intervention during the study to investigate the impact it had on efficacy beliefs. The 'three good things in life' intervention (Seligman 2005; Seligman, 2000) required individuals to reflect upon three positive events or occurrences that had transpired each day. In previous studies Seligman and colleagues had requested participants undertake this process for a one-week period. The intervention had previously impacted significantly during this time (Seligman *et al*, 2005; Seligman and Csikszentmihalyi, 2000); for the purpose of my study, it was decided a one-week period would be sufficient. However, in order to affect the greatest change possible, it was necessary to introduce the intervention appropriately and place it within context. Subsequently, participants in the experimental school received a presentation regarding the 'brief history of Positive Psychology' (Appendix 6) and the theory behind the intervention before asking that they partake in some preparatory activities prior to the intervention itself (see section 3:7:3).

The intervention did not require a great deal of participants' time or effort; therefore I felt it would be more effective to request they record their positive reflections, to encourage active

participation. A recording booklet was designed, thus allowing participants to make a concrete representation of their 'three good things' each day (Appendix 8). The booklet included information about the intervention and instructions regarding how to participate. The key themes developed through the planning-phase were also included, (Figure 1 and Appendix 4) and participants were asked to link their positive experiences to these themes. Participants were also asked to consider the underlying factors of the 'good things' and how these may be attributed to themselves, their skills and positive characteristics.

The booklet provided a page for each day of the week, a space in which to record the good thing, followed by a space in which the reasons for the 'good thing' could be noted. For each day there was space to record 'three good things' and participants were explicitly asked to complete each of the three sections for seven days. Within the recording booklet I also informed participants about confidentiality arrangements, and a section was included where participants could request that their booklets be returned to them following analysis. I also provided my email address, so participants could request further information, or an electronic version of the booklet for their future personal reflection.

3:8:3: Materials used with the focus group during the planning stage

During the FGs a sign-in sheet was present which highlighted all of the necessary information regarding the process and purpose, along with what would happen to the data collected. The groups were given access to a printed copy of the questions to be asked so that full informed consent could be given. I also had a schedule (Wilkinson, 2003) which included information regarding the purpose of the research, the procedure of the FG and the ground rules, for which the participants were consulted and any issues taken into account. The schedule also included the questions I intended to ask, which were based around the discussion with the Head Teacher and designed to elicit areas of negative self-efficacy from the group. There were also a number of cues included on the sheet along with a reminder for me to conclude the group by offering thanks and debriefing the participants.

3:8:4: Materials used with pre-intervention and post-intervention focus groups

The materials used in the pre-intervention and post-intervention FGs were identical to those used in the planning stage; with the exception that questions included were based upon the six themes generated at the planning stage of the research.

A digital recording device was used during all FGs to ensure no information was missed during the process. I transcribed all of the recorded data personally so that I was able to maintain confidentiality as well as becoming more familiar with my data (Braun and Clarke 2006).

3:9: Data Coding and Analysis

As outlined above, I employed a mixed methods approach to collecting and analysing my data. Below is an account of how I analysed both the qualitative and quantitative data gathered.

3:9:1: Quantitative data analysis

The quantitative questionnaire data was statistically analysed. Initially the raw data for both the experimental and comparison groups were scored, taking into account the need for reverse scoring of items 6 and 12. The data was entered into SPSS and analyses were performed to determine the normality and homogeneity of variance of each specific data set, according to the research questions.

Once normality and homogeneity of variance had been measured, in those cases that parametric tests were applicable, t-tests were performed in order to compare:

- The total efficacy scores for the pre-intervention and post-intervention data for both the experimental and comparison groups;
- Scores of questions were totalled according to the themes they represented (figure 1), to create a sub-set of total efficacy scores; t-tests were then performed on each of the theme total scores comparing the experimental pre-intervention and post intervention data;
- The total efficacy scores for the pre-intervention and post-intervention data from the experimental group sorted according to staff role.

In two cases relating to the themed questions, parametric tests were not appropriate. Subsequently non-parametric tests were used to analyse this data.

Quantitative methods are a useful, flexible tool when exploring data in a fairly general sense. However, in this case, they were unable to provide the in-depth information required to study the effects of the intervention in their entirety. Furthermore, there is always a possibility that

statistically significant findings may have been generated by chance. Therefore, the quantitative information was complemented by qualitative data.

3:9:2: Qualitative data analysis

The qualitative FG data was orthographically transcribed, i.e. only the verbal information was retained (Wilkinson, 2003) and analysed using thematic analysis. The following section will provide greater insight into the process of Thematic Analysis, and will consider the possible criticisms of it as an analytic tool.

3:9:3: Thematic Analysis

Thematic analysis (TA) is a procedure that involves the identification, scrutiny, and description of themes and patterns within a data set. It is described by Braun and Clarke (2006) as being the foundational approach to qualitative analysis. This is because it is considered useful in developing key skills which can be applied across qualitative approaches; e.g. 'thematizing meanings' (Braun and Clarke 2006).

Braun and Clarke (2006) highlighted the flexibility of TA and attributed this to its relative freedom from epistemology and theory; and its subsequent compatibility with both constructionist and essentialist paradigms. Therefore, TA can be applied within a variety of different frameworks, making it a useful research instrument capable of generating both a comprehensive and multifaceted account of the data.

TA can be considered as a contextualist method, in line with critical realism, i.e. positioned between constructionism and essentialism on the spectrum of epistemological belief. Through TA it is therefore possible to consider the internal perspectives of the participants (at an agential level), whilst acknowledging the impact of the wider social context upon these personal interpretations. It is imperative to ensure this analysis is placed within the context of reality; and whilst it may be possible to explore objects within the social world and draw conclusions in relation to these (i.e. participants understanding of reality), it is not in any way a definitive account of the real world, simply my understanding of what I have found, which in the same way as the participants' is influenced by socio-historical factors.

Whilst Braun and Clarke, (2006) described TA as a 'foundational method' (p.78), of qualitative analyses, there is some disagreement about this claim. Holloway and Todres, (2003, p.347) described the process of 'thematizing meanings' as a general skill applied across a broad range of qualitative analysis; subsequently, a number of authors have proposed that TA is less an approach in its own right; and more a method, used when undertaking other forms of analysis (Ryan and Bernard, 2000; Boyatzis, 1998). However,

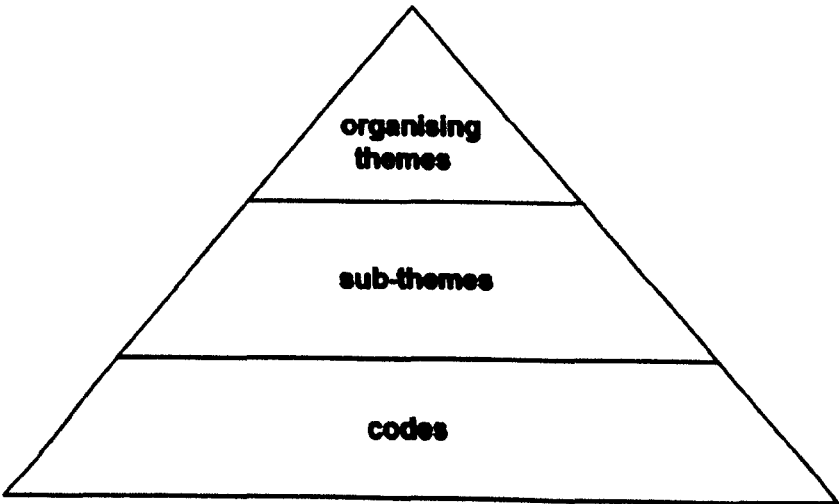
Braun and Clarke (2006) have rebutted this claim, and posited that TA should be considered an independent method of qualitative analysis; due to the flexibility it affords researchers.

TA is not bound to any theoretical basis, as it is in essence, free of theory and epistemology. This is in contrast to those methods restricted to use within a particular theoretical position, such as interpretive phenomenological analysis (IPA), or narrative analysis (Braun and Clarke, 2006). Whilst independence from theory and epistemology enables TA to be applied flexibly across research, the lack of transparency and succinct guiding principles means the approach is open to criticism, on the basis that it lacks structure (Braun and Clarke, 2006). Another of the criticisms of TA is that too often researchers are too vague about what they have done and why they have done it (Attride-Stirling, 2001). Consequently, I will attempt to avoid such criticism by providing a clear outline of the process involved and how the TA was undertaken.

3:9:4: The process of thematic analysis

The product of thematic analysis is hierarchical in nature as illustrated in Figure 2. The process begins with the formation of codes, which are categorised to form sub-themes. Sub-themes are grouped to outline the principles of organising themes; which are more abstract in nature (Attride-Stirling, 2001). Below is a more detailed account of the process involved when undertaking thematic analysis.

Figure 2: Diagram depicting the hierarchical nature of Thematic Analysis



Phase 1: Familiarising yourself with the data: Before beginning analysis it is essential the researcher is familiar with their data. This may involve repeated reading of transcripts (as it did in my case); and ensuring that during this process the data is actively read, i.e. searching the data for patterns or meanings (Braun and Clarke 2006). During this phase it is good

practice to generate a list of coding ideas, regarding what is included within the data, and how these ideas may be of interest within the context of the research study/questions.

Phase 2: The formal coding process: Following phase 1, the researcher must move onto the formal coding process, i.e. forming codes from the data set. The purpose of a code is to highlight a significant aspect of the data. Coding is a key aspect of the analysis; at this stage the data is being organised into significant and noteworthy groupings relevant to the research (Tuckett, 2005).

Phase 3: Generating themes: Once the data has been coded in its entirety, a coherent list of the codes should be made (Braun and Clarke, 2006). This phase involves broader thinking extending beyond the codes themselves; i.e. the researcher is required to sort and collate the coded data into possible themes. By looking for relationships and meaningful patterns between codes, the researcher is engaging in interpretive analysis (Braun and Clarke, 2006). The researcher must examine the themes generated, and consider the different levels within them, i.e. what are the organising themes and which form the sub-themes. At this stage visual representations such as thematic maps/networks are recommended (Attride-Stirling, 2001).

Phase 4: Refining and naming themes: The themes created are then subjected to further scrutiny to ensure they qualify as themes. The researcher should ensure there is enough data to support each theme; that this data is sufficiently analogous; and that clear distinctions can be made between themes. Some themes may be abandoned, collapsed to merge as one, or dissected to form additional themes. Themes must be reviewed at the level of coded data and in relation to the whole data set. The visual representation of the data should reflect this refinement process.

Phase 5: Telling the data's story: Once the themes are finalised, a written account of the analysis is required. It is crucial that the write-up provides a logical and well-evidenced account of the analysis including the conceptualisation of the themes. Data extracts should be included to illustrate the predominance of the themes. This phase involves more than talking through the data; it requires a line of reasoning in favour of the research question, which is underpinned by theory and evidenced throughout (Braun and Clarke, 2006).

The outcome of TA is a condensed and concise visual representation of the data set, accompanied by a rich descriptive analysis of the data. By exploring the process and unpicking the themes it is possible to develop a clear understanding of the data and the theories underpinning it. The data analysis can be located in chapter 4.

Chapter 4: Findings: Qualitative Analysis

Within this chapter I will discuss participants' views of the intervention, the analyses of the pre-intervention and post-intervention qualitative data along with a synthesis of these findings.

4:1: Informal feedback on the intervention

I had initially intended to undertake a focus group immediately following the completion of the 'three good things in life' intervention to gauge participants' views regarding its effectiveness. However, due to logistical reasons this was unable to take place. I did however manage to have an informal conversation with a group of non-teaching support staff and the SENCo regarding their perspectives of the intervention. I prepared questions in advance and made notes of the answers given. A detailed account of responses will be provided in Appendix 9. A summarised account of the feedback is however, included below.

Participants felt it was quite difficult to find three good things each day, as it was out of the ordinary for them to think so positively. They felt it was easier to think negatively about things and that it required effort and practice in order to be more positive. Finding a causal explanation for the 'good things' was reported to be even more difficult; often participants tended to write something because it was expected. During the course of the week, with practice they felt that it became easier to generate three good things. However, they struggled to link their 'good things' to the themes. This was because they related to school and professional ways of working, and sometimes the most positive things that happened, occurred within the home environment. Participants also found it difficult to attribute the explanations for the good things solely to themselves, as they felt the positive things in school were often team related.

Writing the information down was mostly considered to be a positive experience; giving participants time to stop and think about their day. However, it was agreed by the group that one-week was not long enough for them to significantly change their way of thinking. They remarked that they were getting better at it as the week went on, and by extending the period of the intervention, they perceived outcomes would be longer lasting, and may have a positive impact upon students.

So in light of this feedback, it may be the case that the duration of the intervention was an issue to some. I had considered this during the design phase of my study (hence the

introduction of positive exercises prior to the intervention), however due to the hectic nature of school life, and the already busy schedules of participants, I felt, by keeping it short, participation would be more likely. Furthermore, Seligman *et al*, (2005) demonstrated lasting positive effects following a 1 week period of intervention; so it seemed plausible that there may be an effect following this time scale, without disrupting the lives of participants or burdening them too greatly with additional activities/work.

4:2: Phase 1: Thematic analysis (TA) of pre-intervention focus group data

During the initial focus group participants consisted of three non-teaching support staff, 1 teacher, and 1 member of the Senior Leadership Team, who was also a teacher. The questions designed to prompt discussion were based around the themes generated through the planning-phase (see section 3:7:1). The questions were kept deliberately broad enabling maximum discussion and flow of conversation; as I did not want to restrict the data generated. The questions were as follows:

1. How do you feel about the idea there is a shared vision within the school?
2. How do you feel about your ability to fulfil the extended aspects of your role?
3. How do you feel about your ability to evaluate your peers and to give and receive feedback?
4. How do you feel about your ability to take the lead in different situations?
5. How do you feel about your ability to present and speak in public?
6. How do you feel about your ability to manage change?

During the TA process I implemented an inductive method of analysis. This is a *bottom up* approach to TA wherein the codes and themes were robustly linked to the data, i.e. the analysis was data driven (Braun and Clarke, 2006). With this in mind and combined with the lengthy nature of the analysis process, I opted to undertake orthographic transcription, whereby only the verbal information was retained (Wilkinson, 2003).

The session was audio-recorded and once the orthographic transcription was complete I began the analysis process. My first step was to read and re-read the data. Whilst doing so I made notes highlighting the areas that stood out as possible coding schemes. In doing so I was also able to look for any early patterns and areas of interest present.

This was a process I repeated on a number of occasions after having distanced myself from the data. This was to ensure I had not missed any possible codes. Some researchers may

have opted to recruit additional support at this stage, i.e. asking others to also code their data; however, due to the time frame and workload of my colleagues, this was not possible. Nevertheless, by returning to the data with a fresh perspective, I was able to refine and review the initial codes. I combined new ideas with those previously generated, resulting in a richer and more detailed understanding of the data. Following effective and exhaustive categorisation of the data, according to code ideas and possible patterns, I began to develop the initial codes that would potentially be used to sort the data.

I was sure to examine all data extracts according to the notes I had made. The coding process was shaped by the fact the themes were data driven, as such they reflected the content of raw data set itself; rather than the theory driven approach to analysis, in which specific questions are imposed onto the data set (Braun and Clarke, 2006).

Coding was carried out manually. This involved annotating a hard copy of the transcript and physically cutting and organising the data extracts, before sorting them electronically using the cut and paste functions of a word processing package. During this part of the coding process I worked through the data set systematically, ensuring all data was equally attended to. Codes were examined for potential linking features/recurring patterns that could provide the foundations for themes. Returning to this process on separate occasions and using different methods to sort the codes, provided greater opportunity to develop insight into the possible patterns/themes within the data set.

The coded data extracts were sorted into potential themes according to linking features. At this stage, codes were evaluated in terms of possible connecting factors, which could be united to develop an organising theme (Braun and Clarke, 2006).

When thinking about the connections between the codes and possible themes, visual representation was used in the form of a thematic map that was refined as the analysis evolved. Furthermore, data extracts were printed and physically sorted into corresponding piles to help develop understanding of the themes. This procedure involved the creation of organising themes, i.e. the overarching themes, and the sub-themes that supported them. The thematic map generated at this stage of analysis is included below in, figure 3 along with a written account of the organising and supporting sub-themes in section 4:2:1.

4:2:1 Initial organising themes and sub-themes for pre-intervention data

Organising Theme: Presenting

Sub-themes: Adult audience/anxiety, child audience/safe, content, group size, diffusion of responsibility.

Organising Theme: Accountability

Sub-themes: Attainment levels/results, responsibility.

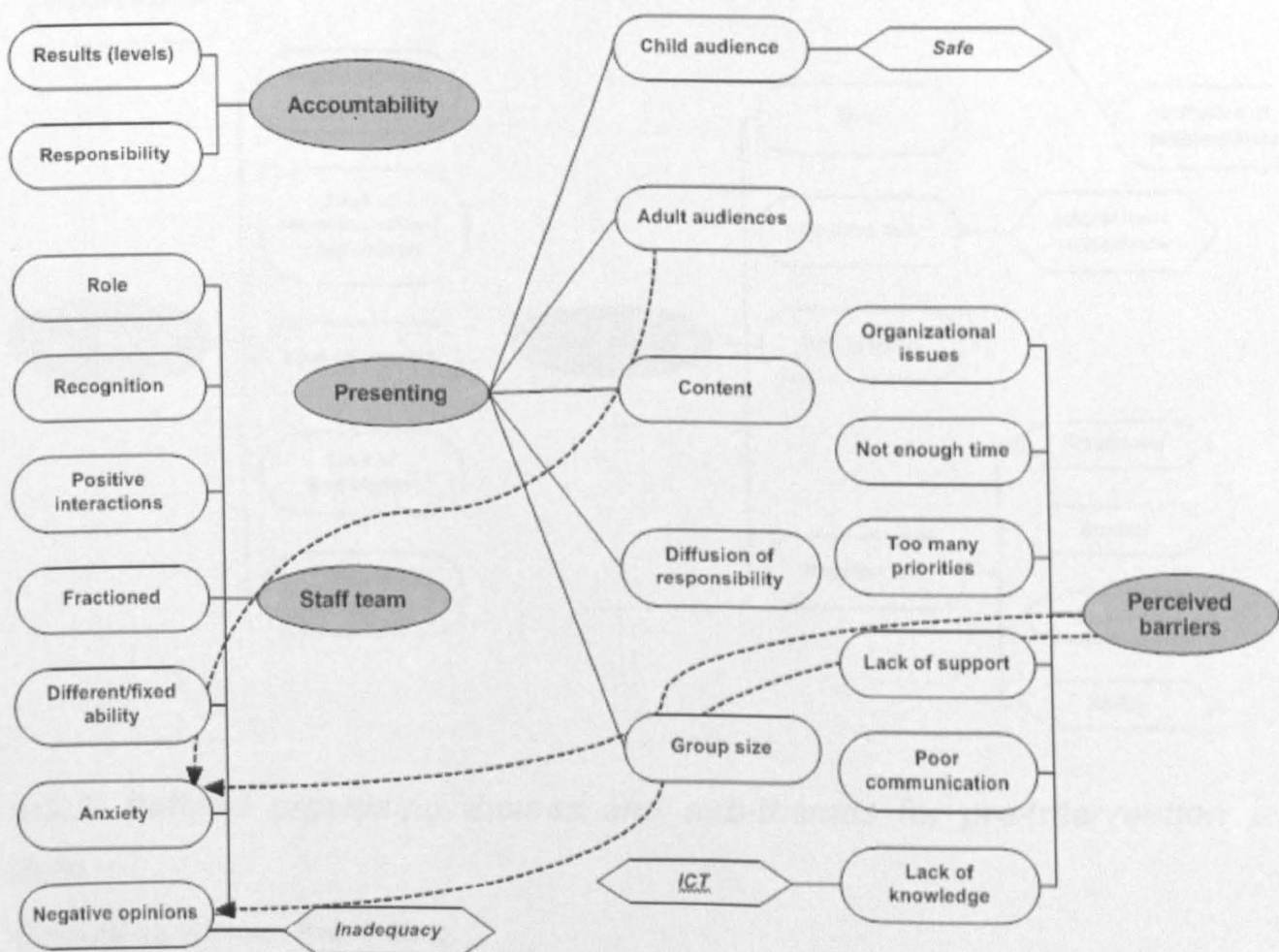
Organising Theme: Perceived Barriers

Sub-themes: Organisational issues, anxiety, poor communication, lack of knowledge/ICT, lack of support, too many priorities, not enough time, negative opinions.

Organising Theme: Staff Team

Sub-themes: Negative opinions/inadequacy, anxiety, role, recognition, positive interaction, communication, and differing ability/fixed ability.

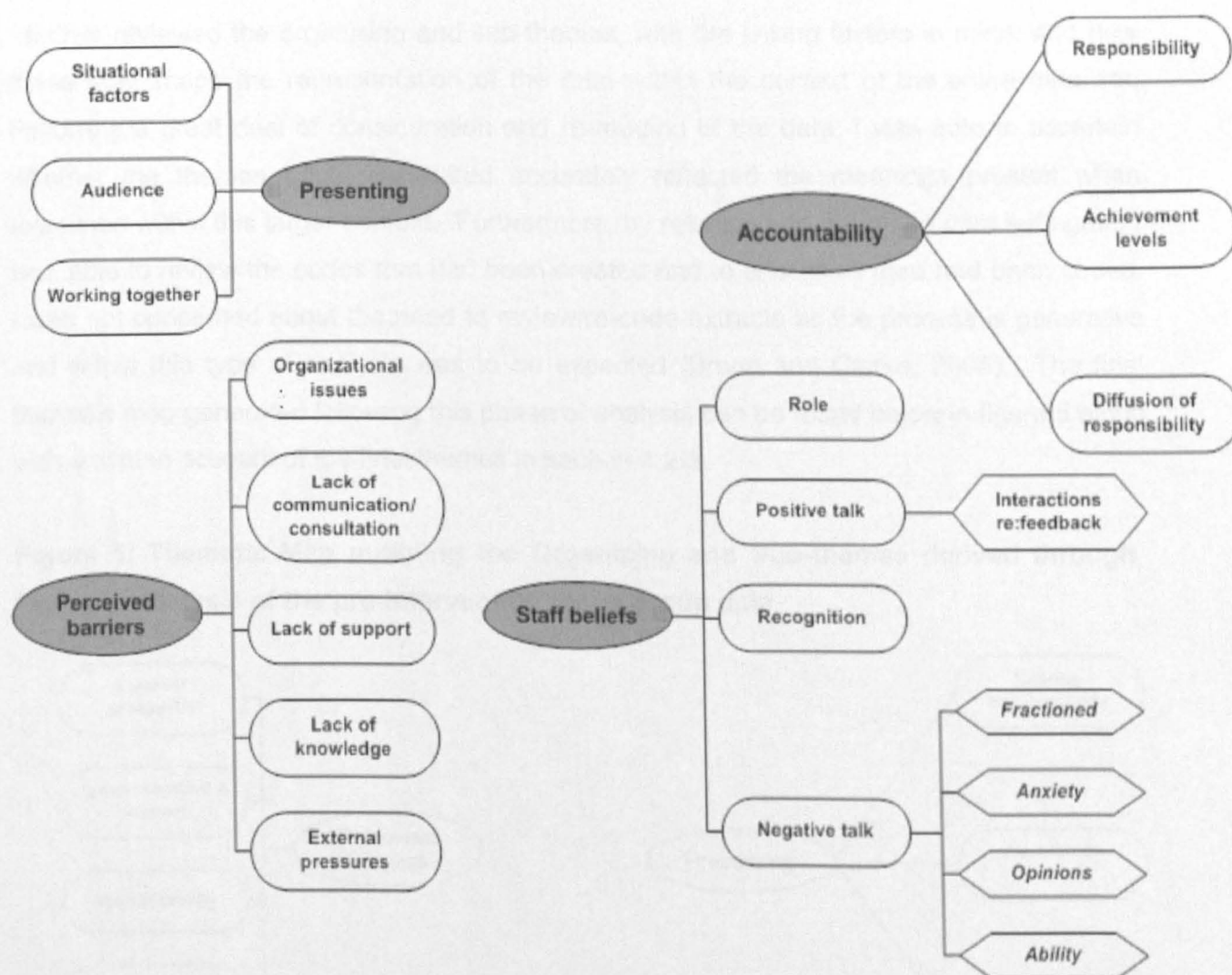
Figure 3: Initial Thematic Map indicating the themes derived through the analysis of pre-intervention data



At this point I began the process of reviewing the initial organising and sub-themes as outlined above. I found it helpful, to firstly consider the sub-themes. These formed the basis of the organising themes; and therefore determined whether the organising themes had

enough supporting data or whether they could be collapsed. Reviewing was conducted at the coding level, i.e. reading through the data extracts exploring the patterns to ensure the perceived relationships were logical and well reasoned. I was able to collapse a number of the sub-themes and reorganised the data extracts accordingly. The refined thematic map of this stage of analysis can be found below in figure 4 along with a written account of the refined themes in section 4:2:2.

Figure 4: Refined Thematic Map indicating themes derived from the pre-intervention data



4:2:2: Refined organising themes and sub-themes for pre-intervention data

Organising Theme: Presenting

Sub-themes: Audience, working together/sharing responsibility, situational factors.

Organising Theme: Accountability

Sub-themes: Attainment levels, responsibility, diffusion of responsibility.

Organising Theme: Perceived Barriers

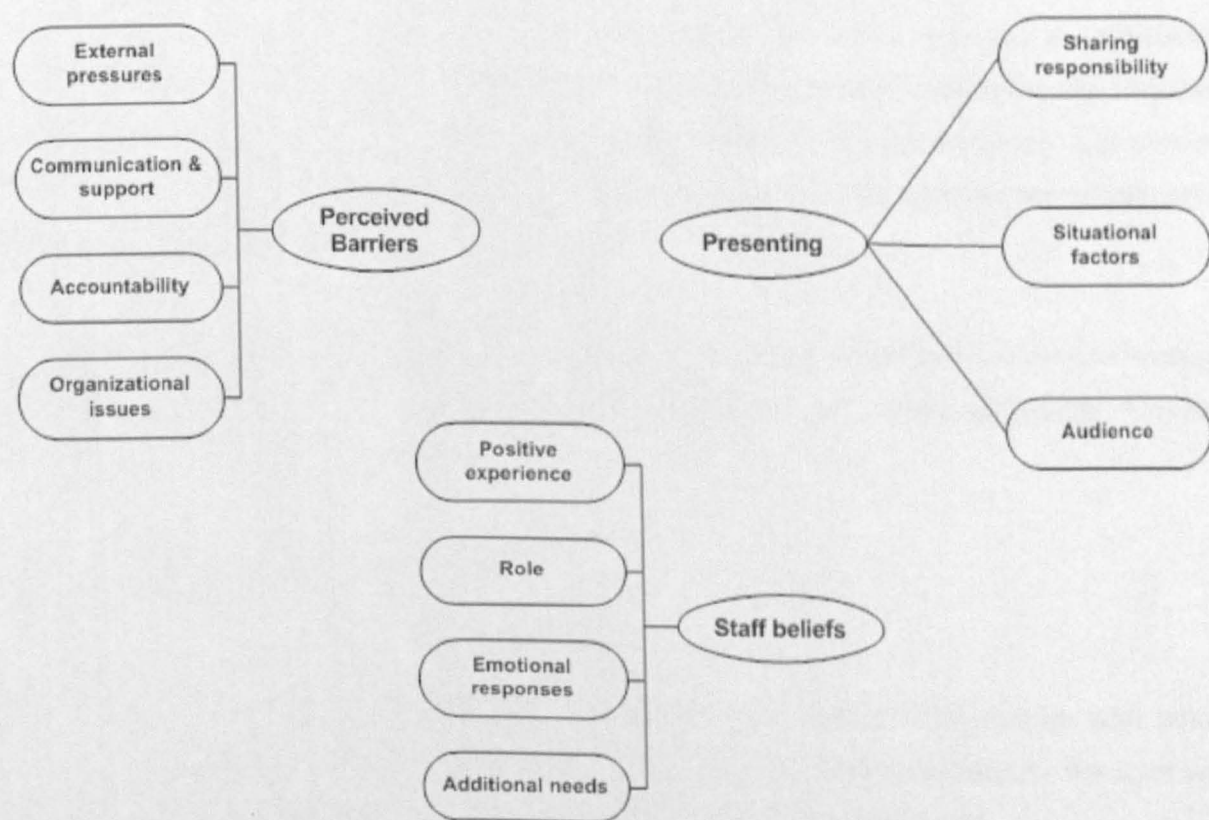
Sub-themes: Organisational issues, lack of communication/consultation, lack of knowledge, lack of support, external pressures

Organising Theme: Staff Beliefs

Sub-themes: Negative talk (ability, opinions, fractioned) positive talk (interaction/feedback) role, recognition.

I further reviewed the organising and sub-themes, with the linking factors in mind; and how these may shape the representation of the data within the context of the entire data set. Following a great deal of consideration and re-reading of the data, I was able to ascertain whether the themes I had generated accurately reflected the meanings present when examined within this larger context. Furthermore, by reflecting on the entire data set again, I was able to review the codes that had been created and to ensure all data had been coded. I was not concerned about the need to review/re-code extracts as the process is generative and within this type of analysis was to be expected (Braun and Clarke, 2006). The final thematic map generated following this phase of analysis can be found below in figure 5 along with a written account of the final themes in section 4:2:3.

Figure 5: Thematic Map outlining the Organizing and Sub-themes derived through thematic analysis of the pre-intervention focus group data.



4:2:3: Finalised organising themes and sub-themes for pre-intervention data

Organising Theme: Presenting

Sub-themes: Audience, sharing responsibility, situational factors.

Organising Theme: Perceived Barriers

Sub-themes: Organisational issues, communication and support, accountability, external pressures.

Organising Theme: Staff Beliefs

Sub-themes: Positive experience, unmet needs, emotive factors, role.

At this point of the analysis I continued to refine the themes. Presented below is a more detailed account of each of the organising themes and evidence to support the characteristics of the sub-themes. Extracts are coded to inform the reader to whom comments belonged: R= Researcher, SLT = Senior Leadership Team, TS = Teaching staff, and NTS = Non-teaching support staff.

4:2:4: Organising theme: Presenting

This theme represented participants' beliefs in relation to presenting in different contexts; to different audiences; and the factors impacting upon their ability to present. Whilst the other themes derived through the planning-phase were also discussed, this was a particularly pertinent topic for participants, who appeared to hold strong and predominantly negative feelings regarding presenting. The amount of data gathered, along with codes and themes generated have meant that whilst other planning themes are not represented individually, presenting is considered a theme in its own right.

Within this theme there were a number of strong sub-themes, which were identified through careful analysis of the data: Audience, Sharing responsibility and situational factors. The first of these to be considered is audience.

4:2:4.a. Sub-theme: Audience

When discussing presenting the participants distinguished between audiences with whom they did and did not feel comfortable. The overriding message represented by the data was that participants felt comfortable and in control when presenting to children.

TS-...But this morning, no problem, 'coz nobody was there to watch me

NTS- Just a group of children which you're used to.

TS- And yet when I'm in front of the children I feel absolutely fine

TS- Whatever you say in the classroom the children think is Gospel

TS- 'Coz they believe everything you say- you're not going to- if you make a mistake, they're not going to pick on you are they?

TS- No, you wouldn't feel foolish

When discussing adult audiences, the sensitivity of the participants was significantly increased. Here they used language with more negative connotations, suggesting they felt less efficacious when presenting to adult audiences.

TS- Like, I don't want to stand up and ...

NTS- I wouldn't want to do it

TS- ... No I mean, X doesn't like doing it and she wont mind me saying, but I mean, I think that, I hate doing assemblies this lot are in...

TS- Mmm, standing up in front of your peers

TS- Not comfortable

TS- ... I get, I get nervous

Within this theme, presenting to adult audiences in two different contexts was incorporated, i.e. assembly style forums and presenting to adults/being observed when conducting one's expected role. These two situations had different bearings upon the views of the participants.

Within the context of presenting to adults/being observed within one's expected capacity or role, the views of the participants differed slightly. Being watched by someone perceived as an equal or superior was not something they reported to enjoy; however, they felt more comfortable within a safe and familiar context where they have greater perceived control.

SLT- erm, I don't relish the thought of being observed, but when it's actually happening, I'm absolutely fine...

SLT-... and it doesn't worry me once I get going. It's just the thought of somebody there watching.

4:2:4.b. Sub-theme: Sharing responsibility

The sub-theme sharing responsibility was conceived because of participants' negative expectations, regarding the perceived threat posed by presenting to adult audiences. Participants identified a number of strategies, which could be used to make the situation less anxiety provoking, such as sharing responsibility with other staff members, thus diluting the personal impact of potential outcomes; and working with others to prepare and rehearse, therefore gaining support from colleagues prior to presentation:

TS- Yeah. Say you were looking at working on, I don't know, some Art element. You introduced it to Key Stage 2 then you've got our backing haven't you?

NTS- Yeah, that would be better that way. Then when you introduced it to the whole staff then its better that way isn't it?

TS- So you're not going in cold are you- you've sort of...

TS- ... already sort of broached the subject before

R: and had like, a rehearsal in effect?

NTS- And that's even better, init? Have everybody in on the Thursday afternoon, and then on Friday morning, we can go!

These suggestions seemed to be designed to reduce feelings of vulnerability and exposure when presenting to adult audiences. Whilst efficacy beliefs remained negative in relation to presenting to adult audiences, feelings of anxiety appeared to be lessened when working in partnership.

4:2:4.c. Sub-theme: Situational factors

The situational factors sub-theme contained extracts in which participants explored the aspects of presenting they did not enjoy; and the situational factors they felt either prevented or enabled them to feel more efficacious about presenting. The main situational factors highlighted by participants were group size and content.

NTS- And it's different with a smaller group. In a, I was in the Polish Parents- yeah and it was alright...

TS- Yeah, you don't shut up

NTS- Yet, if I had to do it in the hall in front of the whole school, I couldn't do it!

SLT- I suppose it depends what you're talking about as well

NTS- If it's something you're comfortable talking about...

TS- Yeah like key stage meetings

TS- But I would hate to stand up in front of the whole board and do something

In conclusion, participants' represented low efficacy beliefs about presenting to others. This theme draws attention to the factors that influenced the participants' sense of efficacy, particularly the strategies and situations, which enabled them to feel more or less efficacious. Within this theme it was possible to distinguish that the factor, which had the most harmful influence on self-efficacy was audience, more specifically adult audience. The factors that supported the development of self-efficacy consisted of sharing responsibility and presenting to children, i.e. factors that enable the participants to feel more comfortable and at ease.

4:2:5: Organising Theme: Perceived Barriers

This theme incorporated factors participants believed hindered the development of SE beliefs in a variety of areas. Unlike the presenting theme which centred upon a specific aspect of their roles, perceived barriers identified the problem areas spanning across role and task; the theme also incorporated a number of influencing factors as indicated by the participants during the focus group.

There were a number of identified sub-themes within perceived barriers and these incorporated: Organisational issues, Communication and support, Accountability and External pressures.

4:2:5.a. Sub-theme: Organisational Issues

Within this sub-theme, participants highlighted concerns regarding how tasks had been organised and the way in which they had been delegated to individuals. The first issue discussed was the way whole team forums were organised.

NTS- I think sometimes when it does come to whole staff meetings, and I think I have spoken to the head about this- the way we organise it has a very big effect on how, how that person gets a response to delivering- 'coz we sometimes just go in and sit in groups and it leads to a lot of talking- you don't get across what you want.

Participants also described their workloads as expanding and that there were many additional responsibilities to be undertaken as a result. Participants felt the organisation of these additional tasks was lacking efficiency; in some instances the poor organisation was

attributed at a macro level, i.e. within the Local Authority; and at a micro level, within the school community, i.e. how tasks were delegated throughout the staff team:

NTS- I think it's been very hard...And there's that much 'do this new unit now, bring evidence of writing now'

SLT- ...it's too much and I think it could have been organised by the Borough better in that respect.

R: and do you think it could have been better organised within the school as well, perhaps?

TS- It wasn't a case of that- I think it's been where the Borough's already said we're focusing on year 3 and 4...See it wasn't the schools at all.

TS-You're just hovering on the brink of everything aren't you?...and never doing anything properly- that's how I feel anyway.

NTS- Yeah shown something and its like 'this is how you do it'

TS- Right. That's that.

TS- ...or you're given it with a piece of paper, 'and this is how you do it'

TS- and then they say 'go and do it yourself' isn't it? You've got so much other stuff to do, it just gets put back.

Furthermore, participants highlighted that within the school community there were those who were less able to become proficient in new initiatives. Due to poor organisation within the school, the additional facilities that would support a greater sense of efficacy were not available; subsequently participants continued to feel helpless.

R: Have you had staff training around...?

TS- Well we have, but the people who are struggling...

NTS- ...Those people need more, need more

SLT- because it's worrying when you can't get your head around something new, and you know you have to do it...

4:2:5:b. Sub-theme: Communication and Support

Within this sub-theme participants discussed how the school was lacking essential support mechanisms, and that there were significant difficulties with communication both to and amongst the staff team members.

R: ...when new initiatives are brought in, it's about investing time in making sure everybody's comfortable with those initiatives?

TS- and we don't get that chance- at all

TS- We don't know- no

TS- The Learning Platform, and all those I've found to be mind-blowing and I do find that aspect difficult. The other things I-I'm ok with, that, it's just the ICT.

SLT- I think a lot of staff have felt like that

TS- Yeah, and I don't really think we've had enough help with that...

Participants linked the lack of support and effective communication feeling of 'not knowing what's going on'. Consequently there was evidence in the data that participants tended to disengage and shy away from those tasks they feel unsupported in undertaking.

TS-This is it. I had a meeting last week and it's just- I sat there thinking; just nod and just...

SLT- Yeah but it's a horrible feeling not knowing what's going on...

R: does that have a knock on effect with anything else do you think?

TS- Well only briefly, because I've got other things to think about, and I think 'Oh well, if I can't do that I'll just have to have a break.

NTS- Put it off and come back to it.

TS- I think, like, whenever you do go to the training...they expect everybody to be at the same level...

NTS- Its like, 'do this, do this, do this' and you, and you're not, you're not

TS- And we went, like, last week and it was like, 'hold on- some of us haven't been able to type in that web address yet' and they're like, 'oh well, come on, you need to hurry up!'

Furthermore, participants highlighted that the lack of opportunities to develop their skills was a barrier, as there were no perceived means of developing competency in these areas.

TS- I think if people were given more opportunity to lead like, a working party group or something, and say: 'Right, were going to look at this aspect'- then you know it would be- people's confidence would- would get a bit better, wouldn't it?

Participants also emphasised how they were not consulted during decision-making processes that inevitably impacted upon them. As such they felt disempowered.

TS- We didn't get any say at all

R: So do you feel dictated to be the Borough?

TS-Yes

TS- Right

One of the most poignant points relating to communication and support concerned the whole-school community. Initially the idea of shared vision needing to be enhanced within

the school community had been raised during the discussion with the head teacher. However, participants also had clear ideas about shared vision within school and the barriers that were preventing it from developing. The overriding implication taken from the following extract was that communication difficulties were preventing the team from operating as a whole:

R: ...but do you feel there's an overall ethos that people want that same things, or like you've said X do you feel that it is quite split off into different groups and its about proving yourself rather than a team proving itself?

NTS- No. I think you've got it straight on the nose there. I don't particularly think the school's a team at all- sadly I think we do have fractions and I think we could be a better team if we talked ...and we're so frightened of saying the wrong things and frightening people- I mean we're all adults at the end of the day, we're all the same, and sometimes I feel we're not brave enough.

R: do you think that's been instilled through the whole 'what's going to happen if I say this? Am I going to be judged because of what I'm saying' and is that the underlying issue?

TS- Yeah

NTS- That's what I'm trying to chip away at, to get people talking more

4:2:5:c. Sub-theme: External Pressures

Within this sub-theme time pressures and the number of priorities imposed upon participants were considered to act as external pressures.

SLT- ...There's that many priorities on the School Development Plan, its just so broad- so...

TS- ... looking at the School Development Plan there's like 10 priorities for like the school year- well maybe if we had less, we could all focus on them more, then everybody knows what, what we're aiming to get...

NTS- Like- my role its- I'll be in year 1 and 2 at first and then I go into year 5 and then I go to year 6, and I need maybe little bit more time to prepare. I don't know- sometimes I'm just being thrown in the deep end...

4:2:5:d. Sub-theme: Accountability

This sub-theme highlighted how participants felt held to account for their actions, when they perceived other factors as responsible in influencing their performance. Throughout the theme there was an implied sense of injustice that participants should be held solely responsible, for the impact of factors which they felt were beyond their control. There is also

evidence that participants were attempting to diffuse responsibility because of the way they felt.

R: ...you're evaluated around achievement levels, rather than perhaps other aspects of school life?

TS- Being in Year 6-yes- we don't have an option, it's reported in the newspaper.

SLT- I think all year groups do...

TS- ...and all teachers feel that, erm, that we're, we're all judged on levels

TS- And with parents coming in- 'oh what level is....' And they don't really understand what it is- I mean they'll come and ...'these kids haven't made this progress- you know- why?' ...

TS- ... Have they had extended holidays or whatever? Its-its like we're accountable for everything that they do.

TS- That's right- 'have they made these two small jumps?' and if they haven't- you know...'Why?'

Participants also suggested parents were overlooking their responsibilities; and that they attributed full responsibility for their child's achievement to the school.

TS- I think parents forget as well that they do have an element of responsibility

NTS- Well said

TS- See its easy isn't it to pass it onto the school

Participants appeared to feel parents had unrealistic expectations of their children, and the school system in general. In the following extracts the participants diffused their perceived responsibility onto the children.

TS- 'What are you doing about it and why have they not done it?'

NTS- Children aren't machines

TS- And they don't always perform

TS- And they don't know they're supposed to make those two little jumps and...

TS- ...And to them it doesn't mean anything does it?

NTS- No, it doesn't- no

TS- Gone from 2C to 2A- wow!

Participants also suggested they felt under too much pressure regarding the amount of responsibility they were expected to bear; and that there were outside influences that impacted upon how accountable they were made to feel.

TS- The media's very good at that as well, media are very quick to blame schools...

NTS- Oh yeah

SLT-...When there are a lot of surrounding issues and things, which contribute to what's going on.

Within the 'perceived barriers' theme, participants emphasised a number of potential impediments towards strengthening efficacy beliefs in a variety of fields. One can also deduce that participants held fairly negative views about the barriers they believed hindered their performance, and how they were perceived by others. It was also apparent, participants believed essential support systems were absent within the school community, which would have enabled them to develop a stronger sense of efficacy.

4:2:6: Organising Theme: Staff beliefs

This theme encapsulated the feelings and experiences of participants; along with their beliefs regarding additional needs present within the school community. There were a number of significant sub-themes that enabled greater understanding of the data; these included: Additional needs, Emotional responses, Role, and Positive experience.

4:2:6:a. Sub-Theme: Additional needs

This represented participants' beliefs that differing levels of ability and competence existed within the staff team. This was emphasised by participants in their description of how some team members are less able to cope with the demands placed upon them.

TS- but the people who are struggling...

NTS- ...Those people need more, need more

TS- ...We're all at different levels and not only that, there's an element of interest involved in it.

TS- And we went, like, last week and it was like, 'hold on- some of us haven't been able to type in that web address yet' and they're like, 'oh well, come on, you need to hurry up!'

NTS- Well, we're not all....

Participants also alluded to the differing skills and abilities amongst individuals; these were perceived as fixed traits, which could not be developed or gained, i.e., you either have the ability or you do not.

TS- I don't know it's like a monster thing- no idea why!

NTS- Not everybody's got that gift isn't it? The speaking?

TS- No, I think it's just the way I am. I can't...

TS- And I think it's just the way you are and you can't help it, can you?

NTS- Yeah, I wish I could be like that

NTS- I'm never going to be that- not now

NTS- Perhaps it's because I'm too bloody confident really- I'm not shy.

TS- I think for some of the staff though, I mean it is the confidence issue...

Participants also highlighted the need for the school community to function more conjointly.

NTS- No. I think you've got it straight on the nose there. I don't particularly think the school's a team at all- sadly I think we do have factions and I think we could be a better team if we talked...and we're so frightened of saying the wrong things and frightening people- I mean we're all adults at the end of the day, we're all the same, and sometimes I feel we're not brave enough.

Participants also emphasised that rather than working together, individuals tended to work to further their own commitments/areas of responsibility; thus obstructing the consolidation of a shared vision within the school community.

R: ...would you say that different people have different agendas they're working to?

NTS- I do

TS- Yeah

TS- I mean everybody wants their own curriculum area to do well, and I think sometimes it's not shared.

4:2:6.b. Sub-theme: Role

Here, participants discussed the perceived inequalities or value judgements, based upon role and/or level of experience within the staff team.

TS- I went down and I worked with X in key stage 1 and...and she knows so much about that, I don't feel I could make a judgement and say, 'oh what about this, what about that?' I think it's your knowledge of it as well, isn't it?

Participants also gave emphasis to how role determined the level of expectation placed upon a member of staff within the team.

SLT- I think sometimes with this presenting and public speaking-because, like- erm- the level you might be at in the school, you might be asked to do more, and if you don't like doing it, its agony

It is clear that role was the influential factor here; suggesting hierarchy may be promoted within the school. Consequently, those with roles commanding less status would be likely to feel a sense of inequality, that their views were perhaps less important. This may contribute to why staff were considered 'not brave enough' to communicate their views openly, and why there was a perceived need amongst participants for better communication:

In the following extracts the role of non-teaching staff was considered; the extent to which they were valued by participants within the group; together with the support and development opportunities available to them.

NTS- Not really, no because I worked 1:1 supporting that child last year

NTS- And I think if you don't- if you're in class supporting, we're better off- we've got more time- well not more time, but we can be allowed aren't we to...?

TS- We can manage

TS- If we did poach you for something, we try and pay you back the time don't we?

The fact that the teaching participant felt they could 'manage' in the absence of the non-teaching participants may suggest that they are viewed as unimportant, or that their role is not considered essential to the successful functioning of the classroom.

R: ... teachers have to do observations of one another, and give feedback. Do similar things happen in your role?

NTS- I wouldn't say so. No. No.

R: Do you feel at the moment that you'd appreciate an evaluation process similar to that the teachers use?

NTS- Mmm

NTS- Definitely

NTS- It does always help doesn't it?

SLT- And I think that when the performance management comes in for you (directed at non-teaching staff) it's going to be trailed. That's, that's, like kind of what you'll get I think.

R: And how would you feel about giving and receiving advice from your colleagues, your peers?

NTS- Fine

4:2:6.c. Sub-theme: Positive experience

The positive experience sub-theme incorporated participants' positive discussions, perceptions, and experiences. There were a number of topics covered within this sub-theme; however the common factor linking these extracts was that all of the associated insights were positive in nature.

R: - How do you feel about being observed and when someone gives you feedback about your practice?

TS- Being observed doesn't bother me at all, and it never has- I- I think any feedback that is given; you can use and just build on that to make your lessons even better.

TS- I was coming in to observe her and you know, she sits and talks to me everyday. I thought, 'You daft thing', you know- I, I mean, I like coming into observe coz you pick up new things- it's great

TS- So that's like the other side of the coin as well isn't it?

TS- ...I think as well- I mean we had erm, from the NQT's observation- she had things that she wanted to work on, so she came to observe in year 6 and I went back to observe and she'd picked up loads of things...and I think that was really beneficial

TS- ...and I think for staff sometimes, giving the feedback, and saying 'well no actually, I really liked the way you questioned what that child...and this was really good!' I think, and I know, and everything I could pick out- 'he didn't do that and did you see what that one did?' and I hope they didn't see! So it is nice to give the feedback and say- you know...

R: The good things?

TS- ...Yeah

Participants discussed how they endeavoured to make others more comfortable during the observation/feedback process. Within the group, it seemed to be a common belief that feedback should be delivered sensitively, in a non-critical and constructive manner.

TS- When I feedback to the students, I always start with things that I've liked about the lesson, just to make them feel comfortable...

TS- ...You would never start with the- You're told never to go in with 'well, I didn't like that bit' or, you know, and you just do that gradually and it makes the student feel confident about how they've been...

TS- ...and then you just sort of bring, you know, little points in as needs- as you need to and that's always gone really well- focusing on the positives

TS- its the way you say it... 'Perhaps you could have done this'

SLT- that's it, framing it more positively as an area to develop rather than...

TS- Anything bad

TS- and its feedback in a, definitely not a critical way

TS- Just suggestion

Within the school community there appeared to be great consideration given to the language used when delivering feedback. The extracts featured above serve to highlight the perceived sensitivities within the staff team; as such, participants appeared particularly conscientious in using positive dialogue and reframing information as constructively as possible, to enhance feelings of success.

4:2:6:d. Sub-theme: Emotional responses

This sub-theme highlighted particularly strong or recurring emotional responses given by participants. The majority of the strong emotional responses generated within the pre-intervention FG were somewhat negative, and therefore possibly detrimental to self-efficacy, i.e. influencing physiological and affective states. One of the clear emotional responses expressed by participants within the data was anxiety.

TS- Yeah but it's a horrible feeling not knowing what's going on...I don't like it at all.

TS-You're just hovering on the brink of everything aren't you...?

TS- And never doing anything properly- that's how I feel anyway.

TS- ...Not comfortable?

TS- I get, I get nervous...

NTS- I do!

Other emotional responses related to participants' perceived lack of knowledge, which might undermine competency beliefs.

R: ...So how do you feel about the additional aspects that are kind of tagged on to your role and your ability to fulfil all of those?

NTS- I don't know, I feel a bit inad-inadequate sometimes with things I have to do... er, you know, like sometimes- I don't know, like sometimes when there's certain things that they do in the class, init? And like sometimes I have to first look up in the book...

NTS- Mmm hmm, and I think I'm not good at everything really. If I was good at everything it'd be great wouldn't it- but there's certain things

Overall, at this stage in the research the majority of the responses to the questions posed held negative connotations; suggesting participants held pessimistic views in relation to their self-efficacy which may affect their practice in a detrimental way. This will be explored in greater detail in the Discussion (Chapter 6).

4:3 Phase 2: Thematic analysis (TA) of post-intervention focus group data

Following the Positive Psychology (PP) intervention, further qualitative data was gathered from participants. The post-intervention focus group participants consisted of two non-teaching support staff, two teachers, and one member of the Senior Leadership Team. The questions asked were the same as used in the pre-intervention focus group (see 4:2).

Following transcription I began the analysis process. The initial method of analysis as described in section 4:2 had proven successful, so I replicated the process with this data set. The initial thematic map generated at this stage of analysis can be seen in figure 6 below; a written account of the initial organising themes and sub-themes developed through the initial coding phases can be found in section 4:3:1 below.

4:3:1: Initial organising themes and sub-themes for post-intervention data

Organising Theme: Progress

Sub-themes: Aware of need to change, September, Individual contribution, Promoting well-being.

Organising Theme: Expectations

Sub-themes: Value of support staff, Low expectations, Previous experience, Role determines responsibility

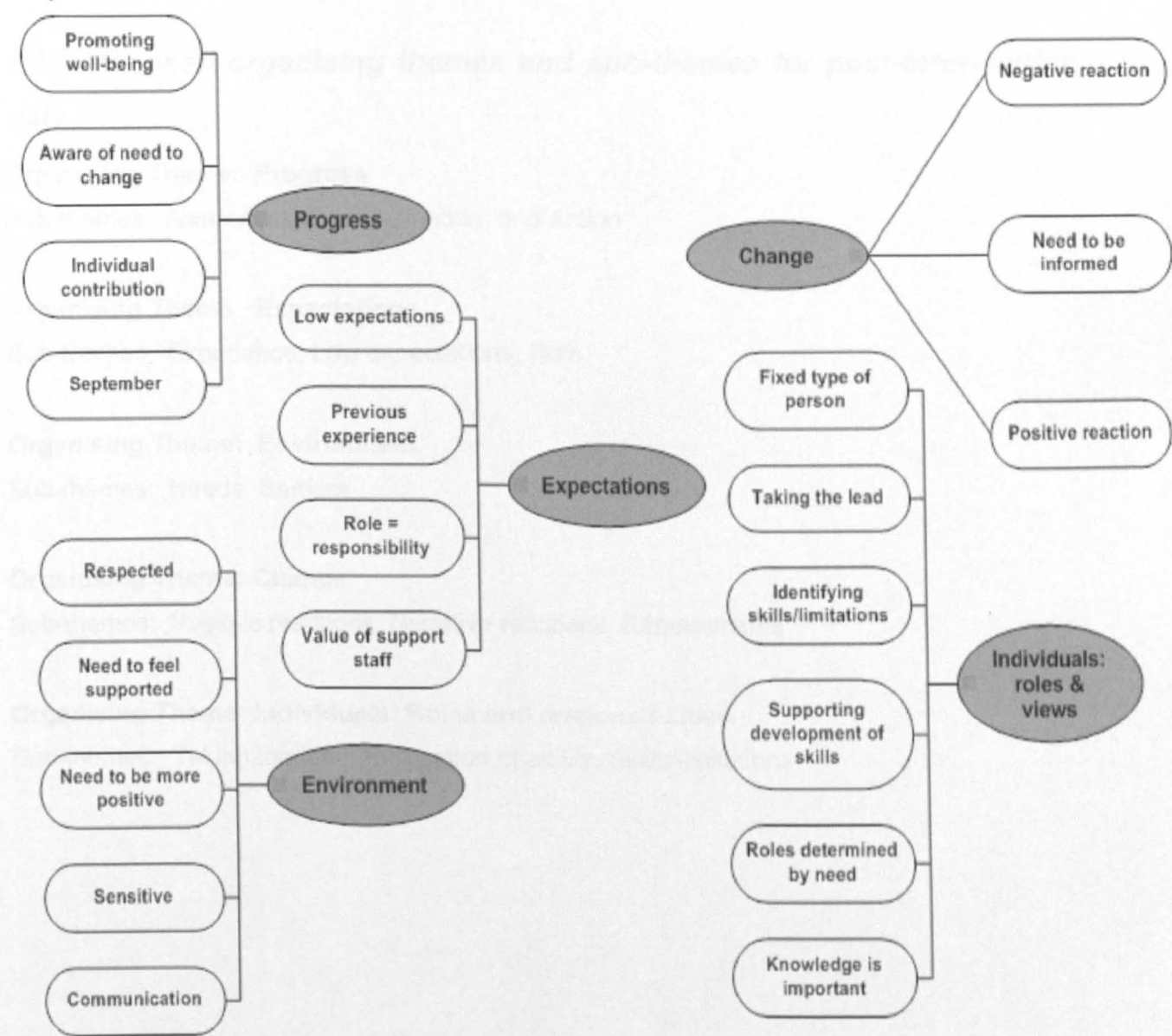
Organising Theme: Environment

Sub-themes: Respect, Need to feel supported, Sensitive, Communication

Organising Theme: Change

Sub-themes: Positive reactions, Negative Reactions, Need to be informed

Figure 6: Initial Thematic Map indicating the themes derived through the analysis of the post-intervention data



These themes were reviewed, using the process described in section 4:2:1. The refined thematic map of this stage of analysis can be found overleaf in figure 7 and in section 4:3:2 below is a written account of the refined themes:

4:3:2: Revised organising themes and sub-themes for post-intervention data

Organising Theme: Progress

Sub-themes: Awareness, Procrastination, and Action

Organising Theme: Expectations

Sub-themes: Experience, Low expectations, Role

Organising Theme: Environment

Sub-themes: Needs, Barriers

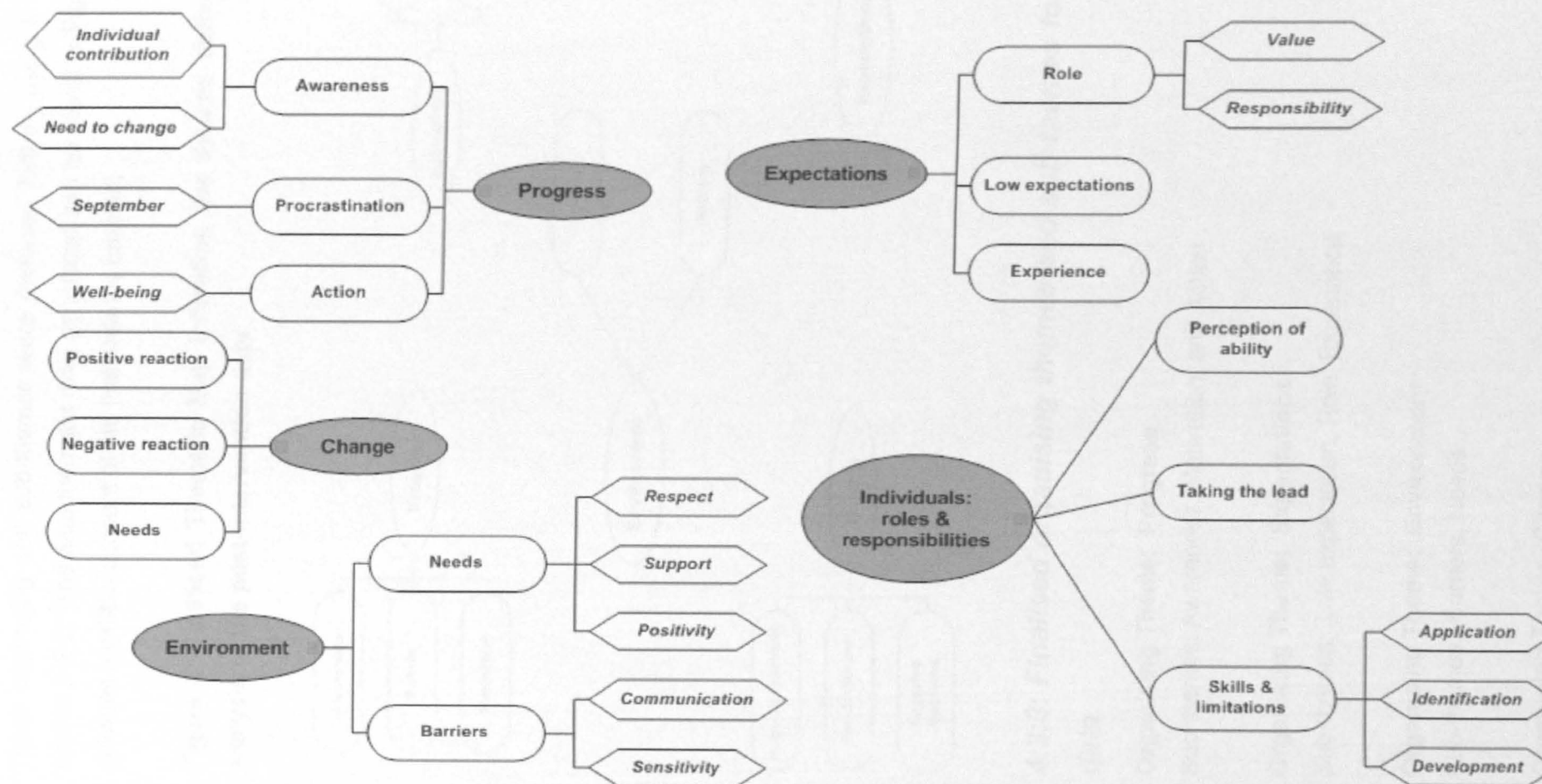
Organising Theme: Change

Sub-themes: Positive reactions, Negative reactions, Requirements

Organising Theme: Individuals: Roles and responsibilities

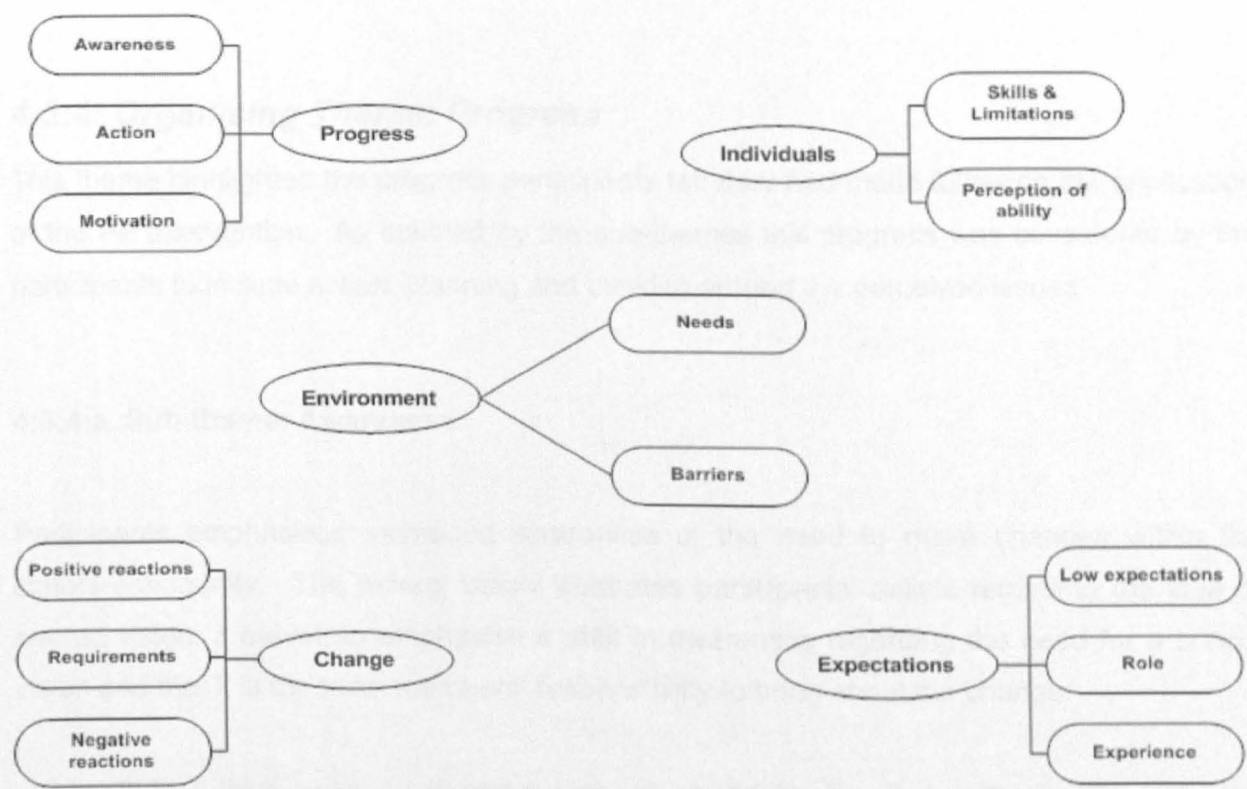
Sub-themes: Taking the lead, Perception of ability, Skills/limitations

Figure 7: Refined Thematic Map indicating the themes derived through thematic analysis of the post-intervention data



These organising and sub-themes were reviewed further, using the process described in section 4:2:2. The final thematic map generated can be found in Figure 8 and section 4:3:4 provides a written account of the final themes created.

Figure 8: Finalised Thematic Map indicating the themes derived through thematic analysis of the post-intervention data



4:3:3: Finalised organising themes and sub-themes for post-intervention data

Organising Theme: Progress

Sub-themes: Awareness, Motivation, and Action

Organising Theme: Expectations

Sub-themes: Low expectation, Role, Experience

Organising Theme: Environment

Sub-themes: Barriers, Needs

Organising Theme: Change

Sub-themes: Positive reactions, Negative reactions, Requirements

Organising Theme: Individuals

Sub-themes: Skills and limitations, Perceptions of ability, Taking the lead.

As with the pre-intervention data, at this point I went on to define and further refine the themes. Presented below is a more in depth consideration of each theme and evidence to support their individual characteristics.

4:3:4: Organising Theme: Progress

This theme highlighted the progress participants felt they had made following the application of the PP intervention. As outlined by the sub-themes this progress was considered by the participants to include action, planning and thinking around the perceived issues.

4:3:4.a. Sub-theme: Awareness

Participants emphasised increased awareness of the need to make changes within the school community. The extract below illustrates participants' beliefs regarding the idea of shared vision; it serves to emphasise a shift in awareness regarding the need for a school vision and that it is the team members' responsibility to bring about the change:

SLT- I think we're more aware that we should be like that, with like the well-being questionnaire and all that sort of, erm, that some of the things that we've started doing

TS- I think we, how, know- we're now thinking about 'Oh what is- the vision- what's my part in it'...Whereas before I don't think there was one at all, and it didn't exist, nobody knew about it

Whilst participants recognised the need for change and that some change had occurred; they acknowledged there was still work which needed to be undertaken.

TS- I think that's an area we still need to work on- is helping people to feel like they can take on these roles

NTS- And I think encourage people to step out of their comfort zones a little bit, but support them while they're doing it.

NTS- I think we should all be encouraged to step out of that.

SLT- To stretch ourselves a little bit

TS- To reach our potential

Participants demonstrated their awareness of the need for further changes within the school systems.

SLT- I am goin' to make- I haven't told X (Head teacher) yet, but I'm going to make some of my time on my timetable that is support staff time, for people just to come to me and say- or come to talk about things or that I can actually...I don't really think that's fair really- need to have more time and its not through lack of wanting, its just that obviously, sometimes if you don't timetable things in they don't happen. I mean you and I speak quite well...

NTS- Yeah

SLT- ... but it doesn't happen enough for other people.

The awareness sub-theme also encapsulated participants' ideas about individuals' roles and responsibilities in terms of perceived progress.

TS- But hopefully as we move towards looking at the big picture of the big vision- everyone's skills and attributes will be drawn on. I think at the moment its still a bit, like, if you make it known you're good at that or this, then you'll be chosen every time- but I think at the moment, a lot of people have got skills that no one knows about...I think it's recognising everyone's...

R: So it's like what you say- it's about recognising and celebrating people's skills and building that into the expectation?

NTS- Yeah

TS- And giving them what they need as well, from an extended role, coz not everybody is scared of presenting and doing things like that and quite enjoy it and would do more...

TS- More part of the school community and more active in terms of building the vision

The extract above links with later analysis regarding expectation. The main point expressed here was that within the school community, there were staff members who had substantial skills and motivation to extend themselves; thus opportunities for individuals to showcase their skills must be maximised to ensure that they too feel valued within the school community.

4:3:4.b. Sub-theme: Motivation

This sub-theme related to participants' motivation to change. Awareness of the need to change was apparent; however the discussion highlighting that change would be affected later in the year, may have suggested they were not ready to fully commit to change at this time.

TS - I think, perhaps in September, the vision will be more, we'll be more aware of the vision and how we're contributing to it.

SLT- I think there's going to be more mechanisms in place in September, like the process meetings on children...

SLT- I think the performance management for support staff will really help in September...

The extract below highlighted possible influencing factors with regards motivation to change within the school community.

SLT- ...But I've also got to take on board if you were feeling anxious or unsure, to bring that into it. Whereas somebody else might say 'Oh well, take that on board.' ...

TS- But you've got to do it- its happening in September, and you have to do it!

NTS- ... Coz if somebody's not sure or not happy about doing something it's gonna affect it all anyway isn't it?

SLT- Definitely

4:3:4:c. Sub-theme: Action

Within this sub-theme participants discussed occurrences within the school community that they felt significant in terms of progression.

R: ...So about presenting and public speaking...how do you feel about it?

NTS- Fine. Absolutely fine. I've already done countless staff meetings so...

SLT- Yeah

TS- As, I've been expected to do it so it's not an issue, but I think people who said 'oh no I'd never do that' have actually done some staff meetings since...

The extract above highlighted that following PP intervention, staff members who had previously rejected additional responsibilities, had taken on board new challenges that were beyond what was expected of them; no longer avoiding the tasks they found difficult.

NTS- Well, I've taken the lead in a new situation, so that's already happening from that point of view...I think that's going to be really positive as well, so really from my point of view, that's a very positive thing to be leading for a whole school.

This extract demonstrated that there had been systemic changes, reflecting commitment to developing well-being and in turn, efficacy, within the school community; and how one

participant had actively taken the lead and extended her role to become Well-being Co-ordinator.

4:3:5: Organising Theme: Expectations

This theme captured participants' thoughts about expectations. Generally they considered the expectations to be low, and consequently felt opportunities for developing skills were reduced. Participants' previous experiences were also considered; and how in different situations expectations were greater. Moreover, the expectations attached to role were considered.

4:3:5.a. Sub-theme: Low expectation

In the following extracts participants highlighted the limitations imposed upon them, due to the expectations others had of them; and that members of the school community had more to offer than was expected of them

R: Ok, Do you feel able to do what it takes to add to and achieve the shared vision?

TS- I think, I think that I've got more to give than what's expected of me...

TS- ...But actually a lot of people, from all different areas of the school, have got the ability to lead and I think that needs to be recognised. Erm, I think perhaps, I've shocked people a little bit coz I've come in and I- I think I have done quite a lot in the year that I have been here, and erm, I hope that's set an example to other people to say 'well you can do it as well.' I knew nothing about the school and I've come in and done what I've needed to do with my curriculum areas and hopefully that everyone will take a bit from that.

The following extract explored participants' views in relation to raising the expectations of the school community; and the impact that low expectations may have on one's future successes.

R: Do you feel that if expectations were raised that that would encourage more people then?

TS- Yes. I think they need to be raised- then everyone feels they're contributing as well. It comes back to that shared vision of where are we going like, 'Oh, I know something about that- should I do- would you like me to do that? And that's what I can offer'

The post-intervention analysis therefore revealed a perceived need to develop as a community, to enhance and share each other's skills to get the best out of individuals and out of the school community as a result.

4:3:5.b. Sub-theme: Role

This explored how role and accompanying status were the deciding factors in determining how much expectation was placed upon individuals within the school community.

TS- And I- you know, it's left to the management and SLT to do the taking the lead bit. But actually a lot of people, from all different areas of the school, have got the ability to lead and I think that needs to be recognised.

SLT- Well, I have to take the lead because of my SLT post.

R: How do you feel about that?

SLT- Erm, ok, most of the time- I know I can do it really, but there are occasions when- I don't like, occasions when there's confrontation. I'm very unsure...

4:3:5.c. Sub-theme: Experience

This predominantly referred to participants' previous experiences in different environments; and the expectations of others they met there. As mentioned above, participants generally perceived current expectations to be low; however this differed to the expectations experienced in the past.

R: ...do you feel confident in taking the lead in different situations?

TS- I think I came with that experience before. In my last school you were expected to take much more of a lead and in fact I feel I've had to step back quite a bit because it's not necessarily the done thing.

Participants recognised greater expectations and therefore greater exposure to particular tasks had enabled them to feel more confident in terms of their capabilities.

TS-...in my last school we did quite a lot of peer observations and in fact you were teamed up, you had a buddy... and we used to observe each other doing lessons, just to try and take things from each other...but you'd just try and use different techniques- then they might see something and go, 'Oh I really liked that' or 'how did you use that?' or if there's something that you could offer them.

Furthermore, the extract below indicated that expectations within the school community were lowered further because of their perceived additional obligations.

SLT- We've done quite a bit of curriculum observation haven't we?

TS- There has been- we didn't experience any in year 6- erm?

SLT- But I think that was because you were on SATs, people thought...

TS- We're still teaching though

As such it is possible to see how the expectations and in some cases the perceived lack of expectation may serve to diminish efficacy beliefs, through the removal of mastery experiences, amongst the participants and wider school community.

4:3:6: Organising Theme: Change

This theme explored the reactions within the school community to the introduction of new initiatives or changes within the environment. The sub-themes included were: positive reaction, negative reaction and requirements.

4:3:6:a. Sub-theme: Positive reaction

Participants held quite positive views in relation to change, and their ability to manage change within their roles and environment. There were some caveats in relation to how they were informed about change, i.e. how it was presented/delivered, (these shall be explored within the requirements sub-theme). However taking these factors into account, the overall view of participants, was that change is a good thing when done for the right reasons.

R: In terms of managing change- how efficacious do you feel about managing change?

TS- I don't mind change- change is a good thing.

SLT- Yeah I was going to say- if it's done for the right reasons

TS- And you're informed correctly- Change can be a good thing

SLT- I think the changes that are brought in, are brought in because they're considered to be necessary aren't they?

TS- Yeah

SLT- And it's a good thing to be moving on and...

NTS- But not only that. I think sometimes, we might fight change in the long run we realise, that perhaps it's a good thing for us, certainly for you're experience, you career-wise or whatever- If you hand a change that you weren't expecting, maybe later in life it could be quite beneficial for you

It is therefore possible to see, that participants in the post-intervention condition felt more efficacious regarding their ability to manage and cope with change. Furthermore, the fact that they discussed potential long term benefits of change also demonstrates an enhanced,

optimistic outlook, as participants acknowledged potential resistance to change, but reflected and reframed this positively in terms of possible outcomes.

4:3:6.b. Sub-theme: Negative reaction

The negative reaction sub-theme provided a contrast to the positive views; however, a lot of the negativity expressed within the following extracts was derived from the way in which change was presented rather than the actual change itself.

TS- Thinking, ' Oh well, should I be doing this because this is a new thing...

NTS- Yeah, but as long as I'm approaching it positively as well, and trying, from whatever reaction that I have got- and I have got negative reactions- I've tried to turn it around to make it into a positive...

TS- But you've got to do it- its happening in September, and you have to do it!

NTS- ... Coz if somebody's not sure or not happy about doing something it's gonna affect it all anyway isn't it?

SLT- Definitely

This provided insight into the implications of introducing change without the full backing of the staff team. Participants felt that in order for change to be successful, they and the rest of the school community must be 'sure' and 'happy' about it. This idea links with the next sub-theme, which was 'requirements'.

4:3:6.c. Sub-theme: Requirements

Participants explored what they perceived to be essential requirements, necessary for change to be accepted and successfully implemented within the school community. One of the primary requirements was the delivery of the proposal, i.e. that those instigating the change within the school present their plans with enthusiasm and anticipated success.

TS- It's like when you go and teach a lesson to the children. If you're like, doing something that you're not happy about...and you might think, 'Oh this is boring- I don't like this' and you go in and that comes from you and the children think, 'Why are we bothering?'

NTS- Yeah

NTS- It's the same when you're dealing with your colleagues as well. You've got to be excited...

NTS- ...You have to come at it- whether you are or not- you've got to be.

TS- ...but it's about how it's delivered to you. If it's delivered in a positive way 'this is going to be good- this is going to benefit you'...'You know we might be giving you more to do in this sense, but we're also taking away this other thing from your workload that you don't need to do anymore'...

TS- ...So if it's delivered to you in the right way...

SLT- Yeah

TS- ...you can see the benefits of it- I think if you're a positive person then you'll take it on and run with it.

In the extract above, participants also emphasised the need to be well and consistently informed about what is being introduced. This information, as touched upon in the following extract, is viewed as critical in terms of their decision making processes:

TS- I think as well, it's about how the change is delivered to you. Like you said, if you're kept informed.

R: So, it's about, kind of, delivering it positively- consistently and people being well enough informed to then act upon it?

SLT- Yeah

NTS- Yeah

TS- If people are informed

Another of the perceived requirements to make change successful was CPD and training opportunities. The extract below highlighted that both of these offer an element of support, especially when learning about new initiatives to be introduced.

SLT- and the support and the CPD that you get to help you to implement the change as well, mmm, because you- sometimes, you do need to have training, whether it's done outside of school or in school from your colleagues...

■ One of the other requirements mentioned by participants was respecting those to whom the change is being proposed.

NTS- Respect. Respect- I might bring in a change that's going to affect you, and if you're not sure about it – If I'm trying to tell you 'we need to do this because...I want you to know this, but I'll work with you.' But I've also got to take on board if you were feeling anxious or unsure, to bring that into it. Whereas somebody else might say 'Oh well, take that on board.' ...

It is therefore possible to see from the post-intervention data relating to change that participants were happy to take on board change, providing the requirements above had been taken into account, i.e. they are well informed, the proposed change is delivered in a positive way, and that they feel supported when undertaking the planned changes.

4:3:7: Organising Theme: Environment

Within this theme, participants touched upon existing environmental issues within the school community that registered some concern with them. Some of the issues discussed were perceived as barriers by the participants; whereas other discussion centred upon potential solutions to the perceived environmental issues, i.e. needs.

4:3:7:a. Sub-theme: Barriers

Within this sub-theme participants discussed how communication could still be somewhat difficult within the school community.

SLT- Erm, ok, most of the time- I know I can do it really, but there are occasions when- I don't like occasions when there's confrontation. I'm very unsure...

TS- Yeah, well its not really confrontation, it's just...

NTS- When someone's put out

SLT- ...Yeah- I – I have to intervene between other people sometimes...

R: Like mediate?

SLT- ...Yeah. I'm the mediator, but it's not always easy. But I do know its part of my role, and I have to do it...

TS- In the SLT that's what you need, you need someone to mediate

SLT- ...Oh yeah

NTS- Someone to say what they think.

The fact that a mediator was called for within the school community may suggest that some members were potentially lacking in the essential resiliency factors that would enable them to cope effectively in such situations.

NTS - I think sometimes if you're not happy with that change, being able to communicate, certainly with the SLT, you've got to have that comfort zone and that security around you to go and speak to them. Whereas some of us aren't...But some of us aren't comfortable about speaking to people, who in their eyes are more superior to them...

Another of the barriers perceived to exist within the school community was inconsistency. In the following extract participants emphasised the damaging effects inconsistency could have on motivation and self-efficacy; and how this could have a detrimental impact upon how an individual may regard a situation.

TS- And we've all been on courses throughout the year and we've all been told different things. And when I went to my course, only last month, erm, there was lots of negativity from other schools because they were- they feel it's not been, sort of, delivered to...

SLT- I think the negativity comes from the confusion and the mixed messages that are given and the contradictions that have happened...

4:3:7.b. Sub-theme: Needs

What participants considered to be 'needs' or solutions to some of their remaining concerns, will be explored within this sub-theme. Previously, the need to feel supported was considered, within the pre-intervention data and briefly within the requirements sub-theme (4:3:7:c).

NTS- I think sometimes if you're not happy with that change, being able to communicate, certainly with the SLT...

TS- ...That's where the respect comes in though, isn't it? If you feel like they respect you, you're more likely to say, 'Well, can you help me with this?' instead of being, sort of, withdrawn and then actually, perhaps not doing the best job you could of done because you don't feel supported.

TS- If people's concerns are taken- as you're doing it- people's concerns- if there's something you think, 'well, I'm not sure about this', but its discussed and shared

NTS- Yeah, 'how will that work?'

R: So it's important to iron out the concerns as we go along?

SLT- Yeah

The idea of feeling supported was extended through the notion of feeling comfortable within the school environment.

TS- I think as more people are beginning to feel more confident in their roles and what's expected of them, maybe as a curriculum co-ordinator, they're feeling more comfortable, to go you know, as everyone's doing it, it's becoming the done thing

NTS- But I think we're quite a long way away, still from being comfortable

Participants also identified the need for the community to adopt a more positive outlook. The participant below perceived the environment and the feedback received as negative. However, her perception that this may change, and her continued belief that change is a positive occurrence, highlighted that not all the members of the community feel this way.

NTS- Sadly, I just feel at the moment, that the environment's very negative, so I'm not particularly getting much positive feedback at the moment. I think that may change- then again, that change can be a good thing.

Participants spoke of the well-being initiative in school; which was designed to target and ameliorate areas of negativity amongst the staff team, in addition to developing a greater sense of well-being throughout the community. So in some sense the identified need to be more positive was already beginning to be addressed.

NTS- ... So it looks like it is going to be beneficial for our staff, because it's very important that we have a healthy balance in our lives...

SLT- It's all about balance isn't it?

NTS- At the end of the day, we spend a lot of time here and it should be positive and our well-being should be being looked after.

4:3:8: Organising Theme: Individuals

Within this sub-theme, views of participants corresponded to the capabilities, roles and responsibilities of individuals within the school community. The sub-themes that contributed to the theme included: Skills and limitations and Perceptions of ability.

4:3:8.a. Sub-theme: Skills and limitations

Within this sub-theme, skill development, application and identification were considered. Participants identified areas in which individuals may require additional support to further develop their skills. The extract below highlighted that participants considered their colleagues in need of support when taking on additional responsibility or extending their roles:

TS- I think that's an area we still need to work on- is helping people to feel like they can take on these roles...

NTS- And I think encourage people to step out of their comfort zones a little bit, but support them while their doing it. Because not everyone's going to remain a teacher or support

assistant all the time. They might move on and go somewhere else and it might be the, you know the normal thing- you might go to another school and they'd expect you to do an assembly every few weeks...

SLT- Yeah

TS- And that might be a real problem for people who've never done it in any comfortable environment.

NTS- I think we should all be encouraged to step out of that.

SLT- To stretch ourselves a little bit

TS- To reach our potential

The idea of identifying and applying the skills of individuals was also present within the data. Previously it had been mentioned that role determined the level of responsibility and tasks undertaken; here participants acknowledged that others within the school community might be better placed to carry out specific duties on the basis of the skills they possess.

TS- But hopefully as we move towards looking at the big picture of the big vision- everyone's skills and attributes will be drawn on... but I think at the moment, a lot of people have got skills that no one knows about...

NTS- Yeah

TS- ...I think it's recognising everyone's...

R: So it's actually identifying the skill and the...

TS- Also accepting other people have other skills...

NTS- Yeah

TS- ...and other people accepting that they might not have them, and they need to step aside and say, 'Oh you're good at that, please can you do it on my behalf?'

R: So is it really celebrating individual's skills and talents?

NTS- Yeah. Without others feeling inferior or anything like that, because their skills are also celebrated as well.

TS- And I- you know, it's left to the management, and SLT to do the taking the lead bit. But actually a lot of people, from all different areas of the school, have got the ability to lead and I think that needs to be recognised.

Moreover, participants highlighted that whilst some individuals were somewhat unsure about taking on additional responsibilities, others within the school community would relish the opportunity.

R: So it's like what you say- it's about recognising and celebrating people's skills and building that into the expectation?

TS- And giving them what they need as well, from an extended role, coz not everybody is scared of, er, presenting and doing things like that and quite enjoy it and would do more...

In the extract below the participant actively generated a scenario of how the skills of her colleagues could be utilised in enhancing the efficacy within the school community.

SLT- Sometimes, you do need to have training, whether it's done outside of school or in school from your colleagues...

NTS- Yeah

TS- ...Who might have used...there might not be a course on 'big writing' coming up, but you work with someone who does know about it.

The fact participants were looking to support their colleagues in developing, recognising and applying their skills was an extremely positive step; one which suggested they were better prepared to work together, as a community.

4:3:8:b. Sub-theme: Perceptions of ability

Within this sub-theme accounts were included which represented participants' views of their own and others abilities.

R: So do you feel confident in taking the lead in that?

NTS- Yes. But perhaps that's a failing for me. I'm perhaps over confident- but it's definitely something I'll be happy to take on board...

SLT- No- you'll be good at that!

TS- ... I think if you're a positive person then you'll take it on and run with it.

In the following extract, participants highlighted that individuals within the school community had the ability to extend their existing contribution to the school community, and that they were willing to do so.

TS- But actually a lot of people, from all different areas of the school, have got the ability to lead and I think that needs to be recognised.

TS- I think some people are more confident than others so I'd quite happily say 'oh, can you give me some feedback on that? How was that? Did it, you know, what could I have done better?' ...

NTS- Mmm

TS- ...I think other people think it comes down to confidence as well

Efficacy is partly derived from previous successful experiences. Therefore, having knowledge relating to specific task requirements would be an important factor contributing to their sense of efficacy. The following extracts denote that participants do value such knowledge.

SLT- Like going into year 6- well, I don't know as much about year 6, so I don't feel as confident being judged on that.

NTS- Yeah

R- So is it the relevance to you? Of your experience and what you've been asked to evaluate?

TS- Yeah

TS- I suppose as well, the criteria you're going to be judged on- are you aware of that before- you know, coz that could help you to reach key stage or whatever class in the school you're in- they know what you're looking for, then it makes the experience a much better, more positive one.

Therefore it is possible to see that perceptions of one's ability, particularly 'confidence', which could be interpreted as efficacy in these instances, were strongly linked to other factors within the school community. These factors, suggested by participants, included: Level of knowledge regarding the specific tasks, self-perceptions associated with the hierarchy within school community, how one's skills and attributes are viewed by others e.g. how positive a person is deemed to be.

4:4: Synthesis of qualitative analysis findings

In this section the qualitative findings from the pre- and post-intervention conditions will be summarised. Findings will also be put into the context of the research questions (see section 1:1); however, given the data-driven analysis, themes alone do not necessarily address the initial questions. As will be seen, a combination of the quantitative and qualitative findings is required to provide more definitive answers.

4:4:1: Summary of pre-intervention findings

Much of the data gathered during the pre-intervention FG was quite negative in nature, with the exception of the positive experiences sub-theme. Participants' conversation was heavily problem-saturated; highlighting concerns and issues regarding the current school climate and systems; interpreted by participants as having a negative impact upon their capabilities to successfully execute a number of tasks. It was possible to see how these judgements had

resulted in low SE beliefs in relation to specific tasks; which had led participants to avoid challenging situations e.g.

'Oh well if I can't do that I'll just have a break'... 'Put it off and come back to it.'

The cyclical nature of efficacy dictates that negative self-perceptions regarding capabilities in these tasks, will inform future efficacy judgements, and therefore, reinforce low self-efficacy beliefs within participants. Other issues relating to the disempowerment of participants through lack of consultation, expectations allocated on the basis of role, and communication difficulties, reflect issues regarding the way in which the school community was operating. By applying a hierarchical model, rather than task-based teams or networks, participants were deprived of mastery experiences, which provide the main source of efficacy. Consequently, participants were unable to develop efficacy beliefs on the basis of previous attainment, specific to the themes, as opportunities to engage in such theme-specific tasks were limited. Perceived lack of communication and support within the community would also act as a barrier to developing the culture and in turn the collective efficacy beliefs of school staff (Durrant and Holden, 2006).

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The strong negative emotional responses given also serve to influence the development of efficacy beliefs amongst participants; interpretation of the physiological or affective states can be perceived as a measure of competency pertaining to the specific tasks. Subsequently, physiology acts as an indicator for their perceived level of competence, which in this case would impact negatively on self-efficacy beliefs.

The data collected from participants during the pre-intervention stage therefore serves to highlight the low sense of self-and collective-efficacy amongst team members; moreover, that conditions in school were more likely to foster negative than positive efficacy beliefs. However, the one positive source of efficacy came from the individuals' themselves, rather than systems, in the form of verbal persuasion, this related to observation and providing feedback. Participants highlighted that feedback must be presented in the most positive and constructive way possible, whilst still highlighting areas for development; thus providing a genuine positive appraisal of ability, i.e. an external judgement of their capabilities, which may work towards strengthening self-efficacy beliefs.

4:4:2: Summary of post-intervention findings

The data gathered during this stage of the study indicated a more positive outlook from participants. The content of the themes pointed to more hopeful perspectives; progress and

change within the school community. Participants recognised there was some way to go in overcoming all barriers to generating and sustaining positive efficacy beliefs, however they pointed out achievements and transformed ways of thinking. Whereas the previous data had more of a negative focus, the post-intervention data was strewn with plans and solutions of how to make the environment more conducive to enhancing efficacy beliefs e.g.

'I think that's an area we still need to work on- is helping people to feel like they can take on these roles' ... 'And I think encourage people to step out of their comfort zones a little bit, but support them while their doing it.'

Participants also discussed how the skills of team members should be acknowledged, celebrated, and better utilised through raised expectations within the school community. This would work towards enhancing efficacy beliefs through mastery and vicarious experiences, verbal and social persuasion; along with adopting a more task-based approach to working, rather than the role dominated, hierarchical method in existence. Participants also highlighted awareness of the potentially negative impact of physiological and affective states in terms of developing self-efficacy beliefs; and considered ways to lessen the impact of these e.g.

'But I've also got to take on board if you were feeling anxious or unsure, to bring that into it' ... 'Coz if somebody's not sure or not happy about doing something its gonna affect it all anyway isn't it?'

The introduction of initiatives like the Well-being programme highlighted how the staff were working towards a more positive outlook; this was also reflected in participants' beliefs regarding change management. Within this data there was also verification that individuals had enhanced efficacy beliefs in relation to presenting and public speaking, taking the lead and evaluating and giving feedback, evidenced in part by increased participation in these tasks (developing opportunities for mastery experience to become a greater source of efficacy beliefs).

Participants also highlighted significant areas for improvement across conditions. These included: communication and level of support within school; the need for increased opportunities for team members to fulfil their potential; and the aspiration to become more involved in decision making processes. These will be explored in greater detail in the discussion section.

Chapter 5: Findings: Quantitative Analysis

Statistical analysis was undertaken to compare the effects of the intervention with those who did not experience it. Within this chapter I will outline the statistical findings in relation to the research questions below.

Research questions

1. Can the self-efficacy beliefs of school staff be enhanced through the application of a Positive Psychology intervention?
2. Are there significant improvements relating to the specific domains identified as less efficacious by the school staff?
3. Does role impact upon capacity to alter efficacy beliefs?

All numerical data was screened to check for missing data, normality, and gross violations of the prerequisites for parametric tests (See Appendices 10, 11, 12, and 13). Where such violations were detected appropriate steps were taken and, when applicable, non-parametric tests were used.

5:1: The effect size

The effect size is a more advanced method of measuring difference between two groups (Field, 2009). It offers more stringency than statistical significance alone, and serves to emphasise the extent of the difference brought about, for example by an intervention (Coe, 2002). The effect size provides a more detailed account of the findings; so in my case it offered insight into how effective the intervention had been, rather than just whether or not it had any effect.

The effect size is calculated differently according to the statistical test employed, and the formulae are featured in Appendix 14. Cohen, (1988; 1992) proposed the following guidelines in relation to the effect size: .10 = small effect, .30 = moderate effect, .50 = large effect. These guidelines were used when reporting the effect size in relation to my findings. In Appendix 14 I have included the calculations used to determine effect size for all tests used throughout my analysis.

5:2: Statistical analysis undertaken comparing the experimental and comparison groups

Table 6: Table to show the mean and standard deviation of the total efficacy scores on the pre-intervention and post-intervention conditions for both experimental and comparison groups

<i>School</i>	<i>Phase</i>	<i>Participants</i>	<i>Mean Score</i>	<i>Standard Deviation</i>
<i>Experimental</i>	<i>Pre-intervention</i>	35	75.66	12.77
<i>Experimental</i>	<i>Post-intervention</i>	35	81.77	11.63
<i>Comparison</i>	<i>Pre-intervention</i>	35	81.20	12.63
<i>Comparison</i>	<i>Post-intervention</i>	35	81.83	13.04

5:2:1: Statistical analysis of total efficacy score for experimental and comparison group using ANCOVA

Analysis of covariance was undertaken in addition to the main analyses, to account for the possible influencing continuous variables (or covariates) on the dependent variable, i.e. efficacy beliefs. By reducing the within-group error variance in this way it is possible to more accurately assess the impact of the independent variable, i.e. intervention.

Table 7: Table to show the mean and standard deviation of the total efficacy scores for the experimental and comparison groups in the post-intervention condition

<i>Condition</i>	<i>Mean</i>	<i>Standard Deviation</i>	<i>Participants</i>
<i>Experimental</i>	81.77	11.63	35
<i>Comparison</i>	81.83	13.04	35
<i>Total</i>	81.80	12.25	70

The ANCOVA showed that there was a significant difference in outcomes having taken statistical account of the covariates, $F(2,67) = 85.22, p = <.01$. The eta squared statistic (.71) indicated that the magnitude of this difference was large.

5:3: Statistical analysis of experimental group data

In order to investigate the research questions which shaped this study, a number of additional analyses needed to be performed on the experimental group data. The findings of these analyses are featured below in sections 5:6:1 -5:6:10.

5:3:1: Comparison between pre- and post- intervention efficacy scores in relation to the theme ‘Taking the lead’

A dependent-samples t-test was conducted to evaluate the impact of the Positive Psychology intervention on the participants' efficacy scores in relation to taking the lead (see section 3:9:1 for information regarding how scores for the themes were obtained).

Table 8: Table to show the mean and standard deviation of the total efficacy scores for the pre and post-intervention conditions in relation to the taking the lead theme

Phase	Participants	Mean Score	Standard Deviation
Pre-intervention	35	10.63	3.31
Post-intervention	35	11.83	2.61

There was a statistically significant difference between the efficacy scores in relation to taking the lead from the pre-intervention (M = 10.63, SD = 3.31) to the post-intervention condition (M = 11.83, SD = 2.61; $t(34) = -3.11, p < .005$. The eta squared statistic (.22) indicated a large effect.

5:3:2: Comparison between pre- and post-intervention efficacy scores in relation to the theme ‘Evaluating, giving and receiving feedback’

A Wilcoxon signed-rank test was conducted to evaluate the impact of the Positive Psychology intervention on the participants' efficacy scores in relation to evaluating and giving/receiving feedback.

Table 9: Table to show the mean and standard deviation of the total efficacy scores for the pre and post-intervention conditions in relation to the theme evaluating, giving and receiving feedback

Phase	Participants	Mean Score	Standard Deviation
Pre-intervention	35	12.	2.02
Post-intervention	35	12.51	2.29

For the participants in the experimental condition, efficacy levels in relation to evaluating and giving/receiving feedback were significantly higher for the post-intervention condition ($Mdn = 13$), than for the pre-intervention condition ($Mdn = 12$) $z = -2.05, p < .05, r = .34$. This suggested a moderate effect.

5:3:3: Comparison between pre- and post-intervention efficacy scores in relation to the theme ‘Extended roles’

A dependent-samples t-test was conducted to evaluate the impact of the Positive Psychology intervention on the participants’ efficacy scores in relation to fulfilling the extended aspects of their roles.

Table 10: Table to show the mean and standard deviation of the total efficacy scores for the pre and post-intervention conditions in relation to the extended roles theme

Phase	Participants	Mean Score	Standard Deviation
Pre-intervention	35	12.06	2.18
Post-intervention	35	13.11	1.94

There was a statistically significant difference between the efficacy scores from the pre-intervention (M = 12.06, SD = 2.18) to the post-intervention condition (M = 13.11, SD = 1.94; t (34) = -4.426, p < .001. The eta squared statistic (.37) indicated a moderate effect.

5:3:4: Comparison between pre and post efficacy scores in relation to the theme ‘Presenting’

A dependent-samples t-test was conducted to evaluate the impact of the Positive Psychology intervention on the participants’ efficacy scores in relation to presenting and public speaking.

Table 11: Table to show the mean and standard deviation of the total efficacy scores for the pre and post-intervention conditions in relation to the presenting theme

Phase	Participants	Mean Score	Standard Deviation
Pre-intervention	35	8.60	3.87
Post-intervention	35	9.63	3.89

There was a statistically significant difference between the efficacy scores from the pre-intervention (M = 8.60, SD = 3.87) to the post-intervention condition (M = 9.63, SD = 3.89; t (34) = -2.34, p < .05. The eta squared statistic (.14) indicated a small effect.

5:3:5: Comparison between pre and post efficacy scores in relation to the theme ‘Managing Change’

A dependent-samples t-test was conducted to evaluate the impact of the Positive Psychology intervention on the participants' efficacy scores in relation to managing change.

Table 12: Table to show the mean and standard deviation of the total efficacy scores for the pre and post-intervention conditions in relation to the managing change theme

Phase	Participants	Mean Score	Standard Deviation
Pre-intervention	35	18.14	2.90
Post-intervention	35	19.80	2.50

There was a statistically significant difference between the efficacy scores from the pre-intervention (M = 18.14, SD = 2.90) to the post-intervention condition (M = 19.80, SD = 2.50; $t(34) = -4.29, p < .001$. The eta squared statistic (.35) indicated a moderate effect.

5:3:6: Comparison between pre and post efficacy scores in relation to the theme ‘Shared Vision/collective efficacy’

As some of the data relating to this theme violated the conditions for parametric tests, when analysing this data, non-parametric measures were employed. A Wilcoxon signed-rank test was conducted to evaluate the impact of the Positive Psychology intervention on the participants' collective efficacy scores associated with a shared vision within the school community.

Table 13: Table to show the mean and standard deviation of the total efficacy scores for the pre and post-intervention conditions in relation to the shared vision theme

Condition	Participants	Mean Score	Standard Deviation
Pre-intervention	35	14.29	4.46
Post-intervention	35	15.17	3.77

For the participants in the experimental condition, collective efficacy levels were higher for the post-intervention condition ($Mdn = 16$), than for the pre-intervention condition ($Mdn = 14$). However this difference was not large enough to be statistically significant, $z = -1.38, p > .05, r = .23$. This however, indicated a small to moderate effect.

5:3:7: Comparison between the pre- and post-intervention total efficacy scores for the Senior Leadership Team (SLT)

A dependent-samples t-test was conducted to evaluate the impact of the Positive Psychology intervention on the SLT's total efficacy scores.

Table 14: Table to show the mean and standard deviation of the total efficacy score for the Senior Leadership Team within the experimental group on the pre-intervention and post-intervention conditions

Condition	Participants	Mean Score	Standard Deviation
Pre-intervention	5	86.80	10.75
Post-intervention	5	87.40	6.19

There was no significant difference between the total efficacy scores from the pre-intervention (M = 86.80, SD = 10.76) to the post-intervention condition (M = 87.40, SD = 6.19; $t(4) = -.12$, $p = .91$).

5:3:8: Comparison between the pre- and post-intervention total efficacy scores for the Teaching staff

A dependent-samples t-test was conducted to evaluate the impact of the Positive Psychology intervention on teachers' total efficacy scores.

Table 15: Table to show the mean and standard deviation of the total efficacy score for the Teaching staff (within the experimental group) on the pre-intervention and post-intervention conditions

Condition	Participants	Mean Score	Standard Deviation
Pre-intervention	12	77.92	10.26
Post-intervention	12	87.58	7.55

There was a statistically significant difference between the total efficacy scores from the pre-intervention (M =77.92, SD = 10.26) to the post-intervention condition (M = 87.58, SD = 7.55; $t(11) = -3.09$, $p < .05$). The eta squared statistic (.46) indicated a moderate to large effect.

5:3:9: Comparison between the pre- and post-intervention total efficacy scores for the Non-Teaching Support staff (NTS)

A dependent-samples t-test was conducted to evaluate the impact of the Positive Psychology intervention on NTS' total efficacy scores.

Table 16: Table to show the mean and standard deviation of the total efficacy scores for the Non-teaching Support Staff within the experimental group on the pre-intervention and post-intervention conditions

Condition	Participants	Mean Score	Standard Deviation
Pre-intervention	16	72.19	13.03
Post-intervention	16	77.75	11.91

There was a statistically significant difference between the total efficacy scores from the pre-intervention (M =72.19, SD = 13.03) to the post-intervention condition (M = 77.75, SD = 11.91; t (15) = -4.00, p = .001. The eta squared statistic (.50) indicated a large effect.

5:3:10: Comparison between the pre- and post-intervention total efficacy scores for the Clerical staff

A dependent-samples t-test was conducted to evaluate the impact of the Positive Psychology intervention on the Clerical staff's total efficacy scores.

Table 17: Table to show the mean and standard deviation of the total efficacy scores for the Clerical Staff within the experimental group on the pre-intervention and post-intervention conditions

Phase	Number of Participants	Mean Score	Standard Deviation
Pre-intervention	2	62.00	11.31
Post-intervention	2	65.00	16.97

There was no significant difference between the total efficacy scores from the pre-intervention (M = 62.00, SD = 11.31) to the post-intervention condition (M = 65.00, SD = 16.97; t (1) = -.75, p = .59. The magnitude of the differences in means was moderate (eta squared = .35).

5:4: Summary and Analysis of quantitative data: conclusions

The summary of the findings will be presented below in a way that related back to the initial research questions posed at the start of the study. This is intended to inform the reader of the significance of the findings in relation to the aims of the research.

5:4:1: Can the self-efficacy beliefs of school staff be enhanced through the application of a Positive Psychology intervention?

The quantitative findings indicated that the total efficacy scores for the experimental group were significantly higher in the post-intervention condition than they were in the pre-intervention. These effects were apparent even after confounding variables were taken into account. This was however, not the case for the comparison group. This suggested that the efficacy beliefs of the school staff were enhanced and that the Positive Psychology intervention may have been instrumental in bringing about this change.

5:4:2: Are there significant improvements relating to the specific domains identified as less efficacious by the school staff?

In relation to the specific themes explored within the experimental group during the study, i.e.

- Taking the lead
- Evaluation, giving and receiving feedback
- Extended aspects of role
- Presenting and public speaking
- Managing change
- Shared vision (collective efficacy)

There were significantly greater post-intervention than pre-intervention scores for all themes except for 'Shared vision'.

It is possible to see that the themes for which scores have increased following the intervention, relate to individual factors, rather than the collective one. However, qualitative findings indicated that collective efficacy beliefs had been enhanced; consequently it may be the case that the statistical test was not powerful enough, or the instrument was not sensitive or reliable enough to detect changes in relation to this theme.

5:4:3: Does role impact upon capacity to alter efficacy beliefs?

It is also possible to conclude that within the experimental group, the total efficacy scores were significantly higher in the post-intervention condition than in the pre-intervention for teaching and non-teaching support staff. This was not the case for the Senior Leadership Team or the clerical staff.

The findings suggest that there was an interaction between role and efficacy. In relation to the SLT and clerical staff, it is possible that there were ceiling or floor effects to the intervention; it is also possible that findings were influenced by the level of commitment and how strictly participants adhered to the intervention.

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Chapter 6: Discussion

In this chapter I will review the findings and consider the possible implications. The methodology of the study will be critically evaluated and future areas of research generated through this study will also be considered.

6:1: Summary of major findings

Below the major findings from both qualitative and quantitative analyses will be presented. Greater detail pertaining to these findings can be found in chapters 4 and 5.

6:1:1: *Qualitative research findings*

Through the comparison of pre- and post-intervention focus group (FG) data, it was possible to conclude, that the self and collective efficacy beliefs of participants had been enhanced, following the period of intervention. This was evidenced through the positive language which dominated the post-intervention data; and clear developments in relation to a number of the themes derived through the planning stage; e.g. shared vision, taking the lead, presenting, evaluating, giving and receiving feedback and managing change. The nature of the method meant that the themes generated through the pre- and post-intervention analysis did not exactly match the questions asked; as the analysis was data driven, and therefore deviated from the original themes in some respects. However, data extracts served to evidence these developments, as outlined in Appendix 15.

In terms of changes related to role, the qualitative data was less able to pinpoint these accurately, however, those within the post-intervention FG, i.e. SLT, teaching and non-teaching staff all seemed to have adopted more favourable efficacy beliefs as indicated by the text. It may be that the social nature of the FG situation, influenced participants responses in some way, e.g. wanting to conform to the majority view. However the data obtained through the self-report measures were better able to provide insight regarding developments in relation to role.

There was a solution focused emphasis within the post-intervention data; suggesting increased awareness amongst participants, of the potential barriers to developing strong efficacy beliefs; and ways in which these could be overcome. I think the qualitative data was particularly useful in providing insight into the potential reasons underpinning the low efficacy beliefs within the school community. More detail regarding the qualitative findings can be found in sections 4:3 and 6:5.

6:1:2: Quantitative research findings

The quantitative research findings will be summarised below according to the analyses that were undertaken. These reflected the research questions posed at the beginning of the study.

6:1:2.a. Total efficacy scores

The quantitative findings indicated that following the implementation of the Positive Psychology intervention (Seligman *et al*, 2005), the post-intervention total efficacy scores of participants within the experimental condition were significantly higher than during the pre-intervention. There was no significant difference between the pre-intervention and post-intervention scores of participants in the comparison group.

6:1:2.b. Efficacy in relation to the specified themes

A number of themes were identified during the planning-phase of the study (see section 3:7:1). The themes represented the areas in which participants perceived themselves and others to hold low efficacy beliefs. Items on the questionnaire were designed to elicit participants' efficacy beliefs in relation to these themes. The pre- and post-intervention efficacy scores relating to these themes were collated and compared; the findings are displayed according to each of the themes below:

6:1:2.c. Taking the lead

There was a significant difference between the pre- and post-intervention efficacy scores in relation to this theme. The difference in mean score indicated an increase in rating; suggesting that participants held more positive beliefs regarding their self-efficacy when engaging in tasks which involved them taking a leadership role.

6:1:2.d. Evaluating/giving and receiving feedback

There was a significant difference between the pre- and post-intervention efficacy scores in relation to this theme also. As non-parametric tests were required to analyse this data, the median figure was used to demonstrate a positive increase, i.e. pre-intervention (Mdn= 12), post-intervention (Mdn= 13). Statistical analysis indicated that this was a significant change.

6:1:2:e. Fulfilling extended aspects of roles

The pre- and post-intervention comparison of efficacy scores in relation to this theme indicated a significant difference. The larger mean score within the post-intervention condition indicated that there was an increase in participants' efficacy beliefs, regarding their ability to fulfil the extended aspects of their roles following the implementation of the Positive Psychology intervention.

6:1:2:f. Presenting

There was also a significant difference between the pre- and post-intervention efficacy scores in relation to presenting. This was one of the areas in which participants' initial efficacy beliefs were especially low. The mean score indicated that the post-intervention scores were greater than those of the pre-intervention, suggesting that their efficacy beliefs in relation to this theme had been enhanced.

6:1:2:g. Managing change

The findings of this analysis specified that there was a significant difference between the pre- and post-intervention efficacy scores in relation to this theme. The mean scores also indicate the directionality of this difference; as the mean for the post-intervention was greater than the pre-intervention. This signified that following the implementation of the Positive Psychology intervention, participants' efficacy beliefs were strengthened in relation to their ability to manage change within the school community.

6:1:2:h. Shared vision (collective efficacy)

The analysis of the pre- and post-intervention data for questions relating to the concept of collective efficacy gave a non-significant result. Whilst there had been a slight increase in the post-intervention scores, this was not statistically significant.

It is possible that the quantitative data collection and analysis was not sensitive enough to detect any changes in efficacy beliefs in relation to this theme; as qualitative data supported an improvement in participants' beliefs regarding the idea of a shared vision within the school

community. This may suggest there were limitations to the quantitative analysis; and had this been carried out independently of any qualitative data collection/analysis, I would have failed to detect the positive changes relating to this theme.

6:1:2:i. Efficacy in relation to role

Furthermore, within the experimental condition, participants' pre-intervention and post-intervention total efficacy scores were examined in relation to their specific role within the school community. The roles which demonstrated a significant increase in their total efficacy scores following the intervention were the teaching staff and the non-teaching support staff. There was no significant difference in pre- and post-intervention total efficacy scores for participants in the Senior Leadership or clerical roles.

6:2: Critical evaluation of Methodology

In this section a critique of the methodology employed during the study will be provided. I will consider the use of a quasi-experimental design, mixed methods; and the qualitative and quantitative aspects of this respectively.

6:2:1: *The Quasi-experimental design*

I opted to use a quasi-experimental design during the research study. Whilst this seemed like the most suitable design option, it is by no means free from issue. Attempts were made to match the comparison and experimental groups as best possible; however this is not always achievable. Section 6:4 below outlines a number of the issues encountered; however to have selected the samples without the use of randomisation would have led to the possibility of sampling bias (Muijs, 2004).

With quasi-experimental designs, the researcher has limited control over the independent variables. Consequently, there is a possibility the effects shown, are as a result of confounding variables (Breakwell *et al*, 1995) rather than the independent variable itself. Therefore, in terms of establishing causality, the quasi-experimental design is less powerful than a pure experimental design (Muijs, 2004). Nevertheless, as using a pure experimental design would be both ethically dubious and difficult to achieve; the matched experimental-comparison design was the best way available to determine the successfulness of the intervention (Muijs, 2004).

The obvious advantage of using quasi-experimental over pure experimental design is that research can be undertaken within natural, educational settings (Muijs, 2004). Whilst the causality of the findings remains difficult to establish, it is still possible to say that the intervention was successful within a highly complex school environment; which makes the findings more valuable than they would be had the research been conducted under laboratory conditions (Muijs, 2004).

It is also possible to critique the research design in terms of duration. As participants' efficacy ratings were only tested once in the pre-intervention and once in the post-intervention conditions, it is not possible to assess the lasting effects of the intervention. This flaw in the design is something that Lazarus (2003; 2003) has critiqued across the field of Positive Psychology, claiming that too much of the evidence base is lacking in the complexity of study afforded by longitudinal designs. Unfortunately, the time frame of my study prevented me from conducting any further follow-up measures, and so in this instance such designs were ruled out as unsuitable.

6:2:2: Using a Mixed methods approach

Qualitative and quantitative approaches were combined during the study to form a mixed methodology. The effective amalgamation of these two paradigms is something which has sparked much debate, and there are those who are still opposed to the union of qualitative and quantitative research methods (Buchanan, 1992; Pawson and Tilly, 1997). As mentioned in my methodology chapter (3), the difference between the two paradigms is perceived by some as inherent, and this proposal has led to the opinion that the two are, by large, incompatible (Muijs, 2004). As the joining of quantitative and qualitative approaches bridges the positivist/constructionist divide, questions have been raised regarding the epistemological basis for such an approach (Miller and Todd, 2002). Despite the conflict between the underpinning epistemologies, there are those who, nonetheless, offer strong support for the use of mixed methods designs (Tashakkori and Teddlie, 2003). Advocates of the mixed methods design acknowledge the different ontological and epistemological bases of the two paradigms. However, the value of generating different information, at different levels, is thought to outweigh the underlying epistemological discrepancy (Ritchie, 2003).

Mixed methodologies provided a practical way of combining the strengths from both qualitative and quantitative paradigms. This approach offered a level of flexibility and the topic of investigation determines the design, rather than epistemology. The researcher is also able to consider both the breadth and depth of meaning and causality (Muijs, 2004). Had I opted to use solely quantitative or qualitative methods independently of each other, I

feel there would be greater cause to critique my chosen design. This will be explored below in more detail with a critique of the quantitative and qualitative methods employed during this study.

6:2:2:a. Critique of quantitative research methods

Quantitative research involves attempting to explain a situation or phenomenon through the collection and analysis of numerical data (Aliaga and Gunderson, 2002). Whilst these methods are reasonably flexible, there are instances in which quantitative methods are limited, e.g. when a problem or area requires in-depth study. Quantitative methods are a useful tool when exploring a large amount of data in a fairly general sense; however, such methods are considered too one-dimensional to study any concept in its entirety. There is a limit to the variables that can be considered in any quantitative study (Muijs, 2004); and the variables, and so study, are driven by the researcher and their goals.

Furthermore, quantitative methods are well suited to testing hypotheses and theories, but lack capacity to generate them. Qualitative methods offer greater opportunity for in-depth study, and through these methods theories and hypotheses often evolve (Muijs, 2004). Quantitative methods have the upper hand in establishing causality; however they lack the depth to consider the underlying meaning of what has been established; limiting the researcher to speculation and conjecture regarding their findings. So independently, quantitative methods are quite limited in their ability to inform on the basis of meaning.

The quantitative aspect of my study was conducted through the use of surveys, i.e. structured questionnaires with predominantly closed questions. There were a number of possible disadvantages to employing this method of data collection; these consisted of the following: answers may have influenced to a greater extent by interpersonal variables, as the respondent did not have the opportunity to discuss answers with the researcher; respondents were more likely to produce 'public' rather than 'genuine' responses; and the possibility of social desirability is greater (Coolican, 1999). Furthermore, despite the fact the questionnaire was piloted, participants may have experienced difficulty when providing responses. The limitations of the questionnaire will be explored in greater detail in section 6:4:3.

6:2:2.b. Critique of qualitative research methods

Qualitative methods offer no single, accepted way of working. Instead, the choice of analysis is based upon the ontological and epistemological beliefs of the researcher, together with other criteria including the aims of the research, audience, and participants (Snape and Spencer, 2003). As qualitative research is more often used as an umbrella term to incorporate a wide range of methods and approaches, it is extremely difficult to define. Furthermore, the multiplicity and sometimes incompatibility of assumptions regarding its intrinsic qualities, means that those authors attempting to define qualitative research usually opt for key characteristics, or working definitions (Snape and Spencer, 2003). Subsequently, due to its woolly and ambiguous underpinnings, qualitative research is left open to criticism.

Qualitative research is generally associated with the early works of Kant (1781), who proposed a set of beliefs outlining the importance of interpretation, and understanding the social world. Subsequently qualitative researchers have placed emphasis upon the understanding and interpretations of the investigator (Snape and Spencer, 2003), making this form of research subjective in nature.

The qualitative aspect of my mixed methods design involved the use of focus groups and thematic analysis. Thematic analysis has been called into question on the basis that it is fundamentally independent of epistemological and theoretical grounding (Braun and Clarke, 2006). Subsequent to the lack of transparency and succinct guiding principles the approach is open to criticism on the basis that it lacks structure and potentially, 'anything goes' (Braun and Clarke, 2006 p.78). Furthermore, the main process involved within thematic analysis, i.e. thematizing meanings, has been identified by Holloway and Todres, (2003) as a wide-ranging skill applied across qualitative research methods. Consequently, whether thematic analysis can be called a research method in its own right is therefore questionable (Ryan and Bernard, 2000; Boyatzis, 1998).

Focus groups (FGs) have been used widely throughout social research for some time, and their popularity has increased over the last twenty years (Finch and Lewis, 2003). They are a method of eliciting participants' views in a spontaneous and synergistic way; providing rich data, influenced to a lesser extent by interaction with the researcher (Finch and Lewis, 2003), and is more akin to informal, everyday conversation (Wilkinson, 2003).

However, within FGs there is a strong social context (Finch and Lewis, 2003; Wilkinson, 2003) and this may have impacted upon the participants involved. For example, as

participants were selected at random, using opportunity sampling, it was not possible to influence the relationships within the group. Furthermore, participants were representative of three different levels of status within the school community, and this may have influenced their willingness to communicate openly. Also, there was a number of dominant participants within the FGs, which made it difficult for the less self-assured members of the group to express their views.

Whilst I made attempts to address the issue by directing questions to the more reticent members of the groups (Finch and Lewis, 2003), upon reflection, it was possible to see that the more forthcoming participants tended to be higher in the school hierarchy, whilst those more reserved were lower down. Potentially this could have been avoided by running a number of groups organised on the basis of role; however recruiting the required number of participants, on additional occasions and taking into account the impact upon staffing situation, I do not think this would have been a plausible approach to take.

6:3: Alternative explanations for findings

As the design employed during the study was quasi-experimental, there was always a chance that other factors may influence the findings, as the controls are less stringent than when using true experimental designs (Breakwell *et al*, 1995). However given the social nature of the research, i.e. the fact that the study was undertaken within school environments, and entirely random sample allocation was not possible, it was necessary to select a design which took into account these factors, whilst as much as possible, retaining the advantages of an experimental design (Muijs, 2004).

Nevertheless, there are a substantial number of variables within educational settings, which may have impacted upon the findings of my study. Consequently, it is necessary to explore these variables and to exercise caution when attributing the findings to the intervention alone (Muijs, 2004).

6:3:1: Conflicting initiatives

Within schools there are often multiple initiatives in progress simultaneously (DCSF, 2007). Subsequently, there is little chance that the intervention can be isolated as the cause of the recorded increase in positive efficacy beliefs within the experimental school community. For example, during the course of the study, the Head Teacher decided it was appropriate to promote well-being within the school community. This involved one of the participants being

appointed as Well-being Co-ordinator (which was likely to have impacted upon her efficacy beliefs).

In addition, the newly appointed Well-being Co-ordinator had sent a survey to staff, gauging their perceptions of well-being, and if they considered their social and emotional needs to be met within the school. This may have prompted participants to examine more closely the supportive/protective factors in place within their environment, and this may have had a knock-on effect on how they responded to the post-intervention questionnaire.

6:3:2: *The Hawthorn effect*

The outcomes of the research indicated the intervention was effective; however, there may be alternative explanations for the findings. It is possible that the apparent increase in efficacy scores was as a result of what has come to be known as the Hawthorne effect (Jones, 1992). In other words, there may have been an experimental effect in the direction expected; however this may not have been brought about by the expected reasons (Olson *et al*, 1994). It is possible that the findings were generated as a result of participants' awareness that they were being studied, rather than any causal basis in the theoretical motivation for the intervention (Olson *et al*, 1994).

6:3:3: *The role of the researcher*

As the link psychologist to both of the schools involved, my role may have impacted upon the way in which participants responded during the surveys and FGs. It is possible that whilst my professional relationship with participants was useful in terms of familiarity with the sample, and in generating a near perfect response rate; it may also have been detrimental, by possibly influencing the way in which participants responded during data collection. This is potentially more relevant when considering the findings generated by the experimental group, as their data was instrumental in the rejection of the null hypotheses.

Participants may have responded in the direction they perceived to be expected; moreover, their reasons for doing so may have related to my previous and future involvement within the school. For example, participants may have attempted to second-guess what was expected from the study, and responded in a way which corresponded with this. This might have been so as to satisfy my perceived research requirements, by providing what they considered to be the desired answers to the research questions. This behaviour could have been driven by a number of potential reasons.

Firstly, I may have been previously involved in casework that had benefited them in some way e.g. helped them to generate solutions to a particular problem, or resolved a systemic issue within the school. It may be that as a result of this, participants wanted to demonstrate their appreciation for my work, by responding in a way which they felt corresponded to my research aims. Secondly, it may have been the case that participants anticipated the need to request my involvement in future casework, and subsequently may have responded in a way that they felt may curry favour with me.

This would be a highly unethical way of working; and I had hoped to avoid this by treating the research study as entirely separate to my Local Authority (LA) work. I was careful to explain the discrete nature of the research when making initial contact with Head Teachers, and during the planning-phase of the study once the schools had been selected. Furthermore, the days the research work was undertaken, were set aside from my LA allocation for University based study only; and it was under these circumstances that I was present when practical application was required.

Whilst this was the case, it may have been possible that some participants were unaware of these conditions of study. It is therefore possible, that some participants may have acted according to the suggested rationalization outlined above.

6:4: Limitations of the research study

Although I attempted to make the research as valid and reliable as possible, there are always potential limitations which may hinder any research process. I have reflected carefully on the research undertakings, and have drawn out the possible limitations I feel, may have potentially impacted upon the research process and findings.

6:4:1: *The sample*

Quasi-experimental designs incorporate the use of a comparison group; the ideal scenario, in order to reduce confounding variables is to ensure that the comparison and experimental groups are matched as best possible. For my study, the samples were selected randomly from my allocated patch of schools. At the outset it seemed that the school samples were suitably matched, in that both groups were drawn from the same Local Authority, and were similar sized mainstream primary schools. Closer inspection of the schools revealed a number of subtle differences which may have had the potential to impact upon the study.

The comparison school was somewhat larger than the experimental, with a larger staff team. The comparison sample was therefore reduced to match accurately with that of the experimental school. Additionally, there were a range of experience, age and ethnicity amongst the participants which I had intended to explore in greater detail. On face value, participants from the comparison school were predominantly of White British heritage, whereas in the experimental schools there was a large percentage of Black, Minority Ethnic (BME) participants. Due to the inconsistent nature with which participants recorded their descriptive information, analysis of such factors was not possible, and as such they can not be accounted for in the findings.

The comparison school also had received a more recent and higher graded Ofsted inspection than the experimental school (Ofsted.gov.uk). It is possible that such highly regarded feedback, located within a national framework, could have influenced the efficacy beliefs of the participants, i.e. the staff with the better feedback may hold stronger, more positive efficacy beliefs. The fact that the pre-intervention mean total efficacy score for the comparison group was higher than that of the experimental group may serve as evidence in this respect (see Table 18 below).

Table 18: Table indicating the mean pre and post-intervention total efficacy scores for the experimental and comparison groups

	Mean total efficacy score: Pre-intervention condition	Mean total efficacy score: Post-intervention condition
Experimental School	75.6	81.7
Comparison School	81.2	81.8

There were also a number of social factors relating to the school population which may have had some bearing on the baseline efficacy beliefs of participants, (i.e. the baseline total efficacy scores were lower for the experimental than comparison group, although the ANCOVA provided some statistical control over the effect of these differences). For examples of such factors, please see the Table below and subsequent suggestions for more detail:

Table 19: Table indicating possible influencing factors resulting in variance between the comparison experimental schools

Factor	Comparison Group	Experimental Group
Student ethnicity	Predominantly White British	Predominantly BME
No Students on roll	451	302
Ofsted outcomes	Mostly 'good'	Mostly 'satisfactory'
English as home language	Majority of students = yes	Majority of students = English as Additional Language
Free School Meals eligibility	'Below National Average'	'High Proportion'
Learning difficulties % School Action Plus	4 students	19 students
Learning difficulties % School Action	16 students	37 students
KS3 results above level 4		
English	93%	64%
Maths	88%	74%
Science	91%	67%

The experimental school potentially have additional barriers to overcome than those faced by the comparison group. For example, the majority of students on roll in the experimental school experience English as an additional language; this will have implications when working to an English curriculum, making both teaching and learning of core subjects more complex (DCSF, 2005; QCA, 2000). These implications may also have impacted negatively on the efficacy beliefs of participants in the experimental sample. This is potentially because, to work successfully with children experiencing EAL, participants must master the use and application of additional resources, specific teaching methods, and assessment practice (DCSF, 2005; QCA, 2000); all of which may be unfamiliar or perhaps daunting to participants and may prompt them to question their efficacy in this area.

The possible barriers presented by language are also reflected in the key stage 3 results; with the experimental sample achieving considerably fewer level 4 (and above) grades in all core subjects than in the comparison group. As mentioned previously, a great deal of emphasis is placed on the outcomes of teaching (DCSF; Ofsted). So when the grades presented in the National League Tables (DCSF) do not necessarily reflect the hard work and effort made by participants, it is possible that efficacy beliefs could be weakened (through detrimental mastery experiences). This point is reinforced by the fact that the sub-theme

'accountability' was also generated through the qualitative analysis of the pre-intervention focus group data:

'And with parents coming in, 'oh what level is....' And they don't really understand what it is... I mean they'll come and 'these kids haven't made this progress'...Have they had extended holidays or whatever? Its-its like we're accountable for everything that they do.'

There were also a greater number of students with special educational needs within the experimental school. These children may require additional or specialised support. This could also impact on the efficacy beliefs of participants. Similarly with the needs of children experiencing EAL, the additional and often varied educational needs of young people can prove challenging to those working with them, especially if the participant had not experienced this type or degree of difficulty before.

These factors may have influenced the findings by producing a lower mean pre-intervention total efficacy score for the experimental condition. However there was a significant increase in the mean total efficacy score for the experimental post-intervention condition, and this was not the case for the comparison group. Whilst the experimental group's pre-intervention mean total efficacy score was lower than the comparison group's, the increase in the experimental group's post-intervention mean total efficacy score, along with the ANCOVA analysis, may suggest that the intervention or the research process itself, had a positive effect in enhancing efficacy beliefs.

6:4:2: Preparation

Prior to the implementation of the 'three good things in life' intervention (Seligman *et al*, 2005), I delivered a presentation at a whole team meeting to introduce the concept of Positive Psychology (PP), and to put the intervention into context. The turn out at the meeting was very good with all five senior leaders 11 of 12 teaching staff and 12 of 16 non-teaching support staff in attendance. However, neither of the two clerical staff were able to attend the meeting. In addition to clerical staff, the four non-teaching support staff and the teacher who were unable to make the meeting may have lacked insight when embarking on the intervention. Hand-outs were left in school for those who were unable to attend; however without these participants actually taking part in the presentation, the effectiveness of this exercise may have been reduced.

Participants were also asked to undertake some informal preparatory positive exercises to help them develop their ability to think positively, and to reframe experiences to consider the positives. Without the introduction and explanation of these exercises; unless later informed by their colleagues, these seven participants may have been less likely to engage with the tasks. Therefore, they may have been less prepared or willing to engage in the intervention.

The presentation style was kept deliberately didactic, following the feedback at the planning stage FG. The participants had specifically highlighted that speaking out in front of their peers was something they felt very uncomfortable about, and had raised it as a source of negative efficacy:

'You know mine don't you? Stepping out of the classroom and doing things in staff meetings'...'Like leading whole school assemblies'...

As I did not want to evoke anxiety in the participants, for both ethical reasons and to encourage their engagement, I wanted to keep the level of required involvement to a minimum on their behalf. They were given plenty of opportunity to ask questions during the presentation, and on a couple of occasions I referred points to small group discussion. However, whilst this style of presentation may have been reassuring and effective for some (Boud, 1987); when taking into account different adult learning styles, to others it may have held less interest (Knowles *et al*, 2005). Consequently, this may have affected the level of engagement during the preparatory phase and in turn during the intervention itself. However, I considered it necessary to take on board the views of participants when planning and undertaking the study, as Harris (2001) stated that one should take into account the school, classroom or faculty in which it is being implemented, in order to enhance the likely effectiveness of the intervention.

The forum in which the presentation was delivered also represented a possible limitation. The team meeting provided a good opportunity to gather together the majority of the staff, in a pre-arranged and expected time-slot. As such, participants were not asked to give up any additional time; however, they were expected to attend the meeting. Due to the compulsory nature of the meeting, perhaps participants were less interested in hearing about Positive Psychology than the cohort may have been if attendance had been voluntary. However if this were the case, I would speculate that attendance would be significantly lower, due to time pressures and other commitments, and the problems faced by the seven participants who could not attend might apply to a much larger number.

Furthermore, the disadvantages of presenting in a team meeting were discussed during the pre-intervention focus group:

'I think sometimes when it does come to whole staff meetings ...the way we organise it has a very big effect on how, how that person gets a response to delivering- 'coz we sometimes just go in and sit in groups and it leads to a lot of talking- you don't get across what you want.'

Given that some participants did not perceive the team meeting as the best environment in which to get information across; upon reflection, introducing PP and the planned intervention in this setting may not have been as useful as first thought.

6:4:3: The questionnaire

Questionnaires were designed following the planning-phase of the study (section 3:7:1). Although participants included in the FG represented three out of the four groups involved with the study; one group was not represented (the clerical staff). The data collected during the FG was analysed using thematic analysis (Braun and Clarke, 2006; Attride-Stirling, 2001), and the organizing themes, along with key points taken from the semi-structured interview, were used as the basis for the questions. It is possible to query the foundations of these themes; and whether the views of the Head Teacher, and the five participants included in the FG were in fact representative of the wider population's.

I spent a significant period researching the possible content and designing the questionnaire during the planning-phase of the study. However, despite this level of effort, I believe there may have been some shortcomings in its design. Firstly, with regards the descriptive information sheet; this was intended to elicit participants' personal information, which may have had some bearing upon the findings of the study (Appendix 2). The weakness of this document became apparent following the collection of the questionnaires; as very few participants had provided all of the information that had been requested of them. All questionnaires had either a name or pseudonym, with the majority specifying gender also. A very high proportion of participants had also included information regarding their role in school, and those which were missing were able to be assigned through process of elimination, or by matching the names with the sample lists provided by the schools.

However the majority of participants in both the experimental and control groups neglected to supply information regarding their age, ethnicity, duration in their current role, their previous appointments and their allocated planning time. It may have been the case that participants considered this amount of information too time consuming to supply, and that despite

assurances of confidentiality, participants were unwilling to provide this level of personal information. Whatever the reason for not completing the descriptive sheets in their entirety, the consequence was that detailed analysis of these variables was not possible. As the vast majority of participants were female, analysis on the basis of gender would provide little useful additional information. Subsequently, the only descriptive variable I was able to use during analysis was that of role.

Another possible limitation identified in relation to the questionnaire was the extent to which collective efficacy was actually measured. It is my concern that during the study I had combined the belief in a shared vision, with the concept of collective efficacy. Whilst these ideas are related, I do not feel, in retrospect that it was best practice to group them, as they do not necessarily represent the same construct. In effect, these should have been analysed as two separate themes. Furthermore, only two questions were actually related specifically to collective efficacy (and one to the idea of a shared vision). Therefore, when dealing with a substantial concept such as collective efficacy, it is not possible to conduct an in-depth analysis or to obtain a detailed understanding when using as few as two questions.

Moreover, the nature of the themes identified by participants deviated somewhat from Bandura's (1977) original model of self-efficacy. The areas of low efficacy under study were more general and related to a broader range of individuals; rather than one specific group e.g. teachers. The areas were also associated with aspects of role, which perhaps differed from traditional duties expected of staff within a school environment. This served to highlight the changes within the British education system and the expectations placed upon those who work within it. Therefore, this may suggest that within education, efficacy may be experienced within a broader sense; however the themes may reflect, to a lesser extent self-efficacy in its purest form (Bandura, 1977; 1997).

6:4:4: *The focus groups*

The convenience/opportunity sampling strategy (Muijs, 2004; Coolican, 1999) used to recruit participants for the focus group (FG), was the most pragmatic method available to me at the time. By choosing to conduct research within a school I had expected to encounter limitations; given the busy nature of the environment. The planning-phase, pre- and post-intervention FGs were scheduled with my contact in school (SENCo), and she recruited participants on the basis of who was available at the time. I had specified to the SENCo that these participants should be representative of the groups included in the larger sample, i.e. SLT, teaching staff, non-teaching support staff and clerical staff. However, due to the nature of these roles, it was not always possible to generate a representative group when employing

this sampling method (Muijs, 2004; Coolican, 1999). The group who were most under-represented was the clerical staff, who were unable to be present during any of the three FGs.

Moreover, the numbers participating in the FGs suffered as a result of convenience sampling (Muijs, 2004). The planning-phase and pre-intervention FGs had good attendance, consisting of five participants as I had requested (Heary and Hennessy, 2002; Krueger and Casey, 2000; Willig, 2001). However, as the concluding aspects of the study were undertaken near to the end of the Summer Term, a lot of the participants were unavailable due to activities such as school trips and award ceremonies.

The post-intervention FG consisted of three participants, representative of three groups within the school. This was not ideal as the number of participants did not fit with some researcher's recommended focus group criteria, (Finch and Lewis, 2003). However Wilkinson, (2003) posited that FGs can consist of as few as two participants, and researcher's tend to specify an upper limit of six participants, rather than a lower one (Heary and Hennessy, 2002; Krueger and Casey, 2000; Willig, 2001). Furthermore, the three participants involved had particularly good relationships with one another, and were able to talk freely and comfortably, generating deep and rich data through social interaction (Rabiee, 2004). So whilst the number involved in the process diminished, I do not feel that the quality of the data was jeopardised.

6:4:5: The intervention

At the time participants were asked to undertake the 'three good things in life' intervention (Seligman *et al*, 2005), the students were undergoing their Standardised Assessment Tasks (SATs). SATs are believed to impact negatively on both staff and students and can lead to increased stress levels amongst these populations (West *et al*, 1994). It is possible that this may have impacted in some cases, upon the level of commitment to the intervention, and the way in which it was completed, i.e. limited positive suggestions or reluctance to engage.

Following completion of the intervention, participants were requested to send their recording booklets back to me or to post them in a sealed box, as was the case with the questionnaire collection. This was to enable me to review the responses and to ensure that participants had completed the intervention as specified by the instructions provided. Specifically, I wanted to ensure that participants had made links between their three good things and the themes that highlighted the areas of negative efficacy belief. Out of a sample of 35 participants, seven booklets were returned (20%).

Following inspection of the returned intervention booklets, it was possible to see they had been completed inconsistently. Some had generated less than three ‘good things’ on some days; others had neglected to record a causal explanation for some; and the majority of ‘good things’ recorded were unrelated to the specified themes.

Some examples of the responses, which did not conform to the instructions of the planned intervention, are given in Table 20 below. These related less well to the specific negative efficacy themes the intervention intended to enhance, and so their significance in terms of the findings is questionable.

Table 20: Table to show responses to intervention, which did not relate to specified themes

‘Positive thing’	Causal explanation
‘Had a long awaited new window fitted in rear bedroom’	‘Had saved money for this to be done’
‘Nice meal tonight’	‘Went to a Brazilian restaurant’
‘Went out for walk’	‘Relaxed and away from the daily grind’
‘Had a good break-time outside on the playground. Playing cricket and games with the children’	‘The sun was shining and it was my duty’
‘I felt my baby kick’	‘Because I am pregnant’

Although some responses did not conform to instruction, some were work-related, and these kinds of responses may have helped towards affecting change in relation to efficacy beliefs. Some examples of the work-related responses can be found in Table 21 overleaf:

Table 21: Table to show work-related responses to intervention

'Positive thing'	Causal explanation
'Meeting with EWO- very positive, good progress towards attendance targets'	'Good communication, both school and EWO'
'Celebration/achievement assembly in school'	'Planned part of the curriculum to help raise self esteem'
'Staff meeting- whole team working together'	'Different members of SLT leading discussion groups on SEF'
'Contributed to the staff meeting in the form of the SEF'	'Enjoyed this extra responsibility'
'Having a really good feeling about the children doing well on their 'circuits and conductors' assessment.'	'They enjoyed their learning and I felt increasingly competent at teaching this unit!'

A full account of the responses received from the 'three good things in life' intervention can be found in Appendix 16.

Therefore, whilst some responses appeared more relevant to the identified themes than others, the inconsistent approach to completion and the limited number of returned booklets, casts doubt on the notion that the intervention was solely responsible for the increase in positive efficacy beliefs.

6:4:6: Additional limitations

At the time the research was undertaken, the United Kingdom experienced significant financial recession. Feelings of uncertainty were evident throughout the schools, heightened by a threat of Local Authority budget cuts. This may have impacted upon the participants' ability to think positively during the intervention.

Furthermore, during the FGs, it became apparent that participants tended to think of their skills as fixed rather than fluid. It is possible this may have had a limiting effect on their belief in the possibility of change.

6:5: Findings in relation to the literature

Within this section the findings will be explored in relation to the relevant literature covered within chapter 2, linking my findings to Positive Psychology (PP), school culture, and self-efficacy.

6:5:1: Findings in relation to Positive Psychology

The findings of the study supported the use of the PP intervention in a school environment. The way in which the intervention was used deviated from its originally intended purpose, i.e. increasing happiness, and decreasing depressive symptoms; although it was still useful in terms of enhancing outlook and affecting positive change with regards efficacy beliefs.

Participants commented on how adopting a positive outlook was useful, and even made indirect reference to PP principles such as 'flow' (Csikszentmihalyi, 2002). So by adopting the principles of PP, participants were able to make a positive difference to their self perceptions.

The theory that positive institutions can facilitate the development of positive traits, and the traits in turn facilitate positive subjective experiences, (Park and Peterson, 2003) was mentioned earlier in the thesis. However during the qualitative data collection, it seemed the reverse was in fact possible; and a bottom-up approach to developing positive institutions was viable, this will be discussed further in section 6:6:1. Participants in the post-intervention FG showed greater positive affectivity, were more focused, and seemed generally happier; this had fostered an enhanced sense of co-operation, and strengthened belief in the need to support their colleagues, and to be proactive in affecting change within their school community. If participants acted upon the suggestions they made during the FG, one might assume that the institution would become more positive as a result. Therefore, if the school worked towards becoming a more positive institution perhaps the original theory would then apply.

The intervention aimed to enhance efficacy beliefs through the cultivation of positive emotion, i.e. happiness. According to Fredrickson's theory, (2004) increasing one's capacity to experience positive emotion should increase their capacity for thought and action, thus enhancing long-term personal resources. Ultimately, working with participants in this way, if sustained, may as Fredrickson suggested, promote well-being and psychological growth. Furthermore, given the changes outlined above, enhancing positive emotion may be the key to developing positive institutions. Perhaps then, Terjesen and colleagues' (2004) work around increasing positive affectivity within student populations may be beneficial with adults and so the development of positive institutions, and in turn the student population.

6:5:2: Findings in relation to school culture

The qualitative data provided useful insight into the possible rationale for the low efficacy beliefs experienced throughout the school community. Across both conditions participants' consistently highlighted concerns regarding the level of open communication and support within the school community; together with the need for increased opportunities for team members to fulfil their potential and become more involved in decision making processes. This offered support for Durrant and Holden's (2006) work in relation to school culture and change. Whilst this was not the focus of the study, I was mindful that working within school communities, may potentially influence the culture in some way.

Durrant and Holden (2006) emphasised the need for open and trustful dialogue and collaborative working when shaping school culture; together with joint/team working involving the sharing and ownership of responsibility across school community. These ideas were represented by the needs participants discussed within the qualitative data. Additionally, centrally controlled change is considered less detrimental to emotional well-being; subsequently a team, rather than top-down approach to organisational change would be the most ethical option when affecting change in relation to school culture (Durrant and Holden, 2006). Conversations regarding the current state of schools, contrasted with their preferred futures were recommended (Durrant and Holden, 2006); consequently, there may be a role for Educational Psychologists to undertake work such as Appreciative Inquiry, to support the whole-school development of positive school cultures.

Furthermore, prior to the study participants in the experimental school reported no existing awareness of the school's vision. It seemed possible that the culture and systems in school had hindered the development of staff efficacy beliefs. For example participants emphasised the hierarchical systems in place, which determined responsibility and opportunity for skill development. This led to poor communication and feelings of inferiority amongst team members. Schein (1992) highlighted that structure should not be the focus when working to influence school culture; this idea was supported by Durrant and Holden, (2006) who emphasised the importance of relationships within school culture. Therefore, work regarding the relationships within the school community may be a more beneficial focus to adopt in support of cultural change.

As the culture within the present school was evolved, it may also be advantageous to consider existing cultures and sub-cultures, and to undertake work to strengthen positive and phase out negative aspects e.g. low expectation (Fidler, 1990). Moreover, the experimental school would, according to Schein (1992) be considered in 'midlife'. Consequently, certain strategies may prove more successful than others, given the needs highlighted by

participants. Systemic promotion of a suitable sub-culture, or technological seduction strategies, i.e. rolling out new human technology (training programmes), may be best suited, as the former echoes Fidler's (1990) ideas, and the latter provides greater opportunity for skill development, a requirement participants highlighted across conditions.

6:5:3: Findings in relation to efficacy

Considering the four sources of efficacy, described by Bandura (1977; 1997) it would seem that opportunities were lacking within the school environment for participants to experience these in a positive way.

Through analysis of the qualitative data, participants indicated there were few opportunities for them to undertake the specific tasks in which SE beliefs were perceived to be low. Therefore, it had not been possible for them to strengthen their efficacy in these areas via mastery experience, as lack of opportunity had resulted in reduced amounts of personal information on which to base competency judgements. Furthermore, as mastery experiences can have a detrimental effect, i.e. time and effort yielding no apparent reward, it is possible that participants' SE beliefs were further hindered as a result e.g. in relation to ICT concepts and achievement levels (Usher and Pajares, 2008). The evidence therefore served to support Bandura's (1997) theory of the role of mastery experience in the development of SE beliefs.

Vicarious experiences become more powerful when there is limited personal experience on which to base competency judgements. Consequently, participants who lacked personal experience in tasks such as 'presenting' therefore formed efficacy beliefs by observing those who had experience. The school worked according to a hierarchy, whereby tasks such as these were delegated to senior staff, i.e. participants' were making appraisals based on social-models whose ability may have been considered superior to their own. This may have impacted negatively in terms of the competency judgements made, resulting in low efficacy beliefs, and supporting the function of vicarious experience in developing SE (Bandura, 1997; Pajares, 1997).

Participants indirectly suggested that verbal persuasion was available as a source of efficacy within the school community, i.e. the way feedback was presented to colleagues was considered to be of great importance. Achievements were the focus of feedback and concerns were reframed as positively as possible.

'When I feedback to the students I always start with things that I've liked about the lesson, just to make them feel comfortable...and it makes the student confident about how they've been...and then you just sort of bring little points in... that's always gone really well- focusing on the positives.'

Qualitative analysis revealed that verbal persuasion was the most readily available source of efficacy within the community. Bearing in mind that verbal persuasion has a lesser effect on shaping self-efficacy, this may offer some explanation as to why beliefs were considered low across the school. It might also be worth noting that the areas in which the most verbal persuasion was received were not represented within the planning-phase data. In other words, efficacy in these areas was greater. Therefore, it may be that verbal persuasion had acted to enforce efficacy beliefs in relation to traditional classroom based tasks. Whereas other, more abstract aspects of role e.g. presenting, had been influenced to a lesser extent by this source of efficacy. Therefore this would offer support to Bandura's (1977; 1997) theory regarding verbal persuasion as a source of SE.

There was evidence within the data to suggest physiological and affective states were prominent sources of low self-efficacy amongst participants. There was a lot of negative emotion related to the tasks specified within the themes. This supported the idea that negative arousal, may be perceived by participants as an indicator of their competency, in relation to a specific task (Bandura, 1997), perhaps suggesting that work may be needed to reduce the negative emotional states of participants. The introduction of the well-being project in school may go some way to achieving this, by promoting physical and emotional well-being (Usher and Pajares, 2008).

Overall it is possible to see that participants' self-efficacy beliefs were unlikely to develop further, on the basis that the sources of efficacy were either not readily available, or were acting detrimentally on self-perception and competency judgement. Consequently, whilst the findings indicated enhanced efficacy beliefs following the study, in order to sustain and build upon these beliefs, changes within the school culture and practices may be necessary, e.g. the introduction of supervision or relaxation techniques (Terjesen *et al*, 2004).

The views expressed in the post-intervention FG, offered support for Bandura's (1997) theory that increased SE is associated with increased effort and motivation. Participants were more enthused and talked proactively about how they could work to develop the school community. They generated many problem solving ideas and stated they were keen to support others, to enable them to fulfil their potential. Moreover, those who had low SE regarding presenting were reported to have undertaken said tasks, demonstrating reduced avoidance. This

suggests that the enhanced SE beliefs affected the choices made by participants and the resulting courses of action (Bandura, 1997; Pajares, 2002). However, it remains to be seen if participants' enhanced level of efficacy enables them to persevere when facing difficulty in line with theory (Bandura, 1997; Pajares, 2002), or whether enhanced efficacy amongst the adult population acts to influence student outcomes in any way.

6:6: Implications of the findings

The findings suggest that the efficacy beliefs of school staff were enhanced following the intervention. This provides support for numerous government initiatives outlining the importance of workforce reform (DCSF, 2009; DfES, 2003). By focusing resources on those who are educating and supporting the development of children and young people within the educational system, it is likely that greater change will be affected, on a much wider scale. Subsequently, the study emphasises the importance of working systemically, and undertaking whole-school work to bring about better outcomes for all. In addition the systemic nature of the study, i.e. working indirectly to improved outcomes for children and young people, may also resonate with contemporary psychologists, who are applying an interactionalist approach (Farrell *et al*, 2006).

The study served to emphasise the importance of other members of the school community; particularly non-teaching support staff; whose contribution to the educational experiences and outcomes of children and young people has often been significantly overlooked (Alborz *et al*, 2009). However this systematic review of the impact of adult support staff on pupils and mainstream schools, highlighted the important impact they have. Findings suggested support assistants are able to: promote social and emotional adjustment, support students with language and literacy difficulties to make significant progress in learning, and facilitate engagement in social and learning activities. These qualities together with their ability to support creative and practical working, enable the teacher greater contact with students through group/individual working, reduce stress, and increase job satisfaction for teachers, whilst proving valuable in engaging parents (Alborz *et al*, 2009), making support staff worthy of involvement in this and future research studies.

Additionally, the findings indicated a significant increase in efficacy scores following the implementation of the intervention. This might suggest that Positive Psychology did have a positive effect within the school community, and that efficacy beliefs were enhanced as a result. Therefore, the findings offer support for the use of Positive Psychology approaches within British schools. Consequently, Educational Psychologists (EPs) may wish to consider building more Positive Psychology into their practice. As mentioned in the rationale section

(1:2), there has been little evidence supporting the application of Positive Psychology outside the USA. This study acts to break the trend of an American dominated research base within Positive Psychology, and may be of greater significance to EPs within the United Kingdom.

There are also implications relating to work vis-à-vis school culture. Within the qualitative data, participants highlighted perceived flaws within the current school climate. Considering these in relation to the four possible sources of self-efficacy, it appeared that culture was influential in hindering or enabling the development of efficacy beliefs. The principles highlighted by Durrant and Holden (2006) pertaining to school culture were supported by participants, who emphasised how the lack of open communication, support, opportunities to take on responsibility and involvement in decision making processes served to diminish efficacy beliefs. Based on these findings, school culture is an important influencing factor to consider, when undertaking research regarding efficacy beliefs within school settings.

Furthermore, the themes generated by participants were broader in nature than would traditionally be considered when studying self-efficacy (Bandura, 1977; 1997). They were unrelated to any of the role-specific foci considered within teacher efficacy literature. This may indicate a significant shift within the education system, or serve to reflect cultural differences between the UK and USA. However, this creates implications for the study and conceptualisation of efficacy within education. Perhaps if more resources were allocated to exploring the areas of efficacy school communities believe need enhancing, together with thinking how best this could be achieved, there would be more useful research to contribute to meaningful outcomes within the education system.

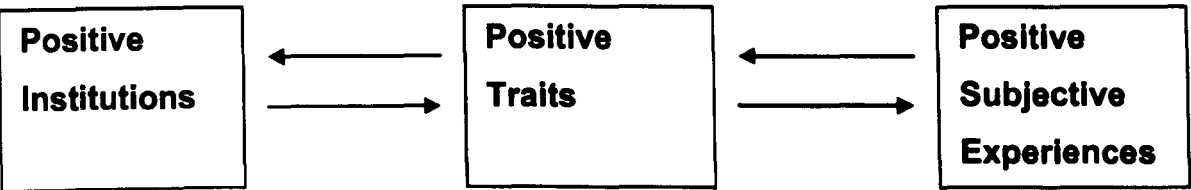
6:6:1: Implications for future research

The limitations of this research highlighted in the sections above, may provide a basis for additional studies within this research area. For example, it would be helpful to replicate this study with different schools in different areas. As mentioned, the experimental and comparison groups would need to be suitably matched to reduce the possible influence of confounding variables. However, by replicating the study it would be possible to investigate whether applying Positive Psychology in this way can have similar effect elsewhere, potentially strengthening evidence for the use of approaches such as the 'three good things in life intervention'.

Furthermore, there is potential for future research in relation to the Positive Psychology theory described by Park and Peterson, (2003). This theory suggested that positive institutions facilitated the development of positive traits and these in turn facilitated positive

subjective experiences. However my findings have suggested that this theory may be bi-directional in nature, i.e. positive subjective experiences may facilitate the development of positive traits, which in turn may help to generate positive institutions, see the diagram below in Figure 9. Subsequently, future research may centre upon the investigation of bi-directionality, or perhaps investigating the possibility that the theory may even be multi-directional.

Figure 9: Diagram highlighting the proposed bi-directionality of the theory described by Park and Peterson (2003).



It also would be useful to undertake further follow-up measures of the efficacy scores, to consider the lasting effects of the intervention. In Seligman *et al's*, study (2005), the follow-up measures were undertaken one week, one month, three months and six months after completion of the intervention. This may be a useful template for a possible follow-up time scale, enabling researchers to consider the impact of the intervention over time, and whether schools may require additional support from EPs to sustain their enhanced level of efficacy beliefs and positive outlook.

It would also be interesting to investigate the potential effect that enhancing efficacy beliefs within the wider school community may have on student outcomes, i.e. broadening the focus from teachers' efficacy, to consider other staff. This was not possible in my case, due to the scale of the study and the timeframe. However, by using baseline and follow-up measures of students' efficacy beliefs, or indeed educational outcomes before and after working with school staff, it may be possible to explore the effects of working in this systemic way. There would be a great deal of research to be done in terms of exploring the potential confounding variables beforehand, and in obtaining parental consent for the sample. However, once these had been accounted for, it may be possible to achieve greater understanding of how much the children and young people are influenced by the work undertaken with adults in schools.

Kurtz and Knight (2004) outlined the segregation within secondary school communities. The qualitative findings of this study suggested that pressure faced by staff in primary schools might also result in isolated working. This was reflected in the pre-intervention focus group data e.g.

'I mean everybody wants their own curriculum area to do well, and I think sometimes it's not shared'.

This could lead to ineffective and individual, rather than joint-working, which serves to increase the level of pressure felt by team members. So working with a school community to enhance its sense of shared vision and collective efficacy through work on school culture and ethos would be a worthy research topic and would contribute to outcomes for all.

The study has offered support for work in relation to the sources of efficacy available in school communities and how these may be maximised in order to support enhanced efficacy beliefs. Future research may then focus on school culture and structure; and the role these play in strengthening efficacy beliefs in relation to the four sources of efficacy. This may also create a role for educational psychologists (EPs), who may work with school communities to enhance the four sources of efficacy, and in turn reinforce positive efficacy beliefs of school staff. There may also be a role for EPs in developing school culture using the principles outlined by Durrant and Holden (2006), in order to affect positive change. The potential implications for EPs will be considered in more detail below.

6:6:2: The contribution of the research study to the Educational Psychologists (EP) role

This study has demonstrated the potential usefulness of Positive Psychology (PP) within school settings. The current emphasis placed upon enhancing children's emotional health and well-being outlined in the DCSF Children's Plan (2007) offers a role for PP and those who might support its dissemination most effectively. Thus, EPs might seek to make use of PP.

PP approaches are intended to enhance strengths and virtues in the hope of equipping individuals with better personal resources to deal with future difficulty (Terjesen et al, 2004). As such, EPs may choose to take this direction with their work, affecting change for the wider school population by working systemically to enhance strengths and virtues. Furthermore, EPs may opt to incorporate PP into practice such as consultation, i.e. emphasising the strengths in relation to individuals and the school setting, and working to strengthen relationships as well as promote successful outcomes through enhancement of efficacy beliefs.

The theory and principles of the PP movement are also somewhat easier to access than others, so school staff were better able to comprehend and appreciate its beginnings. By sharing the theory with these individuals, it is possible that they become more invested in the outcomes, and from the experiences derived through this study, may express a genuine interest for the psychology involved.

Strengthening our clients' interest in psychology, may serve to increase the value placed upon EPs and the unique work undertaken by them, potentially resulting in a diminished focus on statutory assessment (Ashton and Roberts, 2006) and more opportunity for creative and innovative ways of working, as a way of affecting change and improving outcomes (Cameron, 2006; Gersch, 2004).

6:7: Conclusion

In conclusion, the study has demonstrated the enhancement of the efficacy beliefs of staff within a school was associated with the application of Positive Psychology. However, given alternative explanations for the findings, and the message derived from the qualitative data it may be the case that for efficacy beliefs to be strengthened within school communities in the long-term, a focus on school culture and enabling factors such as the sources of efficacy must be adopted.

Furthermore, the principles of PP appeared to have been effective, and valued by team members on this occasion. However if PP is to be taken seriously as a movement it requires more substantial and sound research, potentially involving intensive qualitative methodologies, more in line with its principles, to develop more in-depth understanding of all three levels of PP.

I think a case has also been made for extending the study of efficacy beliefs to other members of the school community. Teachers do not work in isolation; they are a part of a social system, whereby collaborative working and shared understanding is paramount. Moreover, the areas in which participants reported low efficacy reflected a shift in the roles and challenges faced by education professionals. Future research should take into account this shift to reconceptualise efficacy within education, and to better understand the needs of these professionals, and how best to work towards improving outcomes for all.

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Appendices

Appendix 1: The 6 Core Virtues and 24 strengths

(Seligman 2002, p.11, p.140-158)

1. Wisdom and Knowledge

- a. Curiosity/interest in the world
- b. Love of Learning
- c. Judgement/critical thinking/open-mindedness
- d. Ingenuity/originality/practical intelligence/street smarts
- e. Social intelligence/personal intelligence/emotional intelligence
- f. Perspective

2. Courage

- a. Valour and bravery
- b. Perseverance/industry/diligence
- c. Integrity/genuineness/honesty

3. Love and humanity

- a. Kindness and generosity
- b. Loving and allowing oneself to be loved

4. Justice

- a. Citizenship/duty/teamwork/loyalty
- b. Fairness and equity
- c. Leadership

5. Temperance

- a. Self control
- b. Prudence/discretion/caution
- c. Humility and modesty

6. Spirituality and Transcendence

- a. Appreciation of beauty and excellence
- b. Gratitude
- c. Hope/optimism/future-mindedness
- d. Spirituality/sense of purpose/faith/religiousness
- e. Forgiveness and mercy
- f. Playfulness and humour
- g. Zest/passion/enthusiasm

Appendix 2: Questionnaire Pack: Cover Sheet and Instructions

Dear Colleague,

Thank you for agreeing to participate in my doctoral research project, I am very grateful for the time you have given. You may already be aware that this study contributes to my University studies and qualification in Applied Educational Psychology; and that I am investigating the impact of positive psychology on self-efficacy beliefs.

Self-efficacy beliefs are defined as: *'People's beliefs about their capabilities to produce effects.'* As such they do not reflect what a person is actually capable of doing, simply their perception of their ability.

The questionnaire is designed to measure these self-efficacy beliefs and so will not be linked to actual outcomes in any way. Furthermore, all of the information collected will be stored securely and confidentially and participants will remain anonymous. Individual beliefs will therefore, not be associated with names or by inference at any time.

Your participation in this study, although highly valued, is voluntary. You have the right to withdraw at any time. However, the data collection processes have been designed to take up as little time as possible. Furthermore, the study is designed to give something back to the whole school community and as such, your participation would be instrumental in affecting positive change.

One you have completed the questionnaire, according to the instructions below you have a number of options:

You may post your questionnaire in the sealed box situated in the staffroom

You may obtain a stamped addressed envelope from X and post you questionnaire directly to me

If you have missed the deadline for collection; you may obtain an envelope from X in which you can seal your questionnaire, before placing it into the large stamp-addressed envelope which will be posted directly to me by X.

Thank you once again for your participation.

Instructions for questionnaire completion

1. Please put your name/password in the space provided at the top of the page.
2. When answering the following questions please circle the item on the rating scale which best represents your view.
3. If you wish to provide additional information this may be given in the section labelled: *Any other Comments* on p3.
4. Once you have completed the questionnaire, please fill in the descriptive information sheet on p4.

Ref code:

Questionnaire

	Very strongly disagree	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree	Very strongly agree
1. I am able to take the lead successfully when working in partnership with my colleagues.	1	2	3	4	5	6	7	8
2. I am able to take charge of a situation and instruct/direct my colleagues when required.	1	2	3	4	5	6	7	8
3. I am able to evaluate and provide constructive feedback to my colleagues.	1	2	3	4	5	6	7	8
4. I am able to accept feedback, advice and guidance offered by my colleagues (regardless of role).	1	2	3	4	5	6	7	8
5. I am able to extend my role to include additional responsibilities.	1	2	3	4	5	6	7	8
6. I am not confident in my ability to present to my colleagues, managers and governors in forums such as the team meeting.	1	2	3	4	5	6	7	8
7. I am confident in my ability to deliver whole school assemblies.	1	2	3	4	5	6	7	8
8. There is a shared vision amongst staff of how school could be if we challenged and extended ourselves to fulfil our potential.	1	2	3	4	5	6	7	8
9. I am able perform well in all extended aspects of my role, to work towards achieving the school's shared vision.	1	2	3	4	5	6	7	8
10. All staff are able fulfil extended aspects of their role, to work towards achieving the school's shared vision.	1	2	3	4	5	6	7	8
11. I am able to successfully manage change within school systems.	1	2	3	4	5	6	7	8
12. I am unable to successfully incorporate new initiatives into my practice.	1	2	3	4	5	6	7	8
13. I am able to be flexible in terms of my practice and adapt to new environments and audiences	1	2	3	4	5	6	7	8
14. All staff are able to work flexibly and are capable of adapting their practice according to the audience and environment.	1	2	3	4	5	6	7	8

Any Other Comments:

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Thank you for taking the time to participate in my study,
Hannah Critchley

Descriptive Information

This information will be kept confidential and stored securely. Under no circumstances will any names be included in the research.

(If you prefer you may use a password or pseudonym).

Name:

Gender: M ☐ F ☐

Age:years

Current role within school: Teaching ☐ Non-teaching ☐ SLT ☐

Duration in this role:years months

Number of educational settings you have worked in previously:

Type of setting in which you have previously worked:

Primary ☐ Secondary ☐ Nursery ☐ Other ☐

(If other please state)

.....

Locations in which you have previously worked:

Inner city ☐ Suburban ☐ Rural ☐

Current designated PPA time per week:hour(s). N/A ☐

If you currently work with a class of young people can you please indicate the class size and Key Stage:

Number of students: Key Stage:

Thank you for your participation.

Appendix 3: Timetable of research schedule

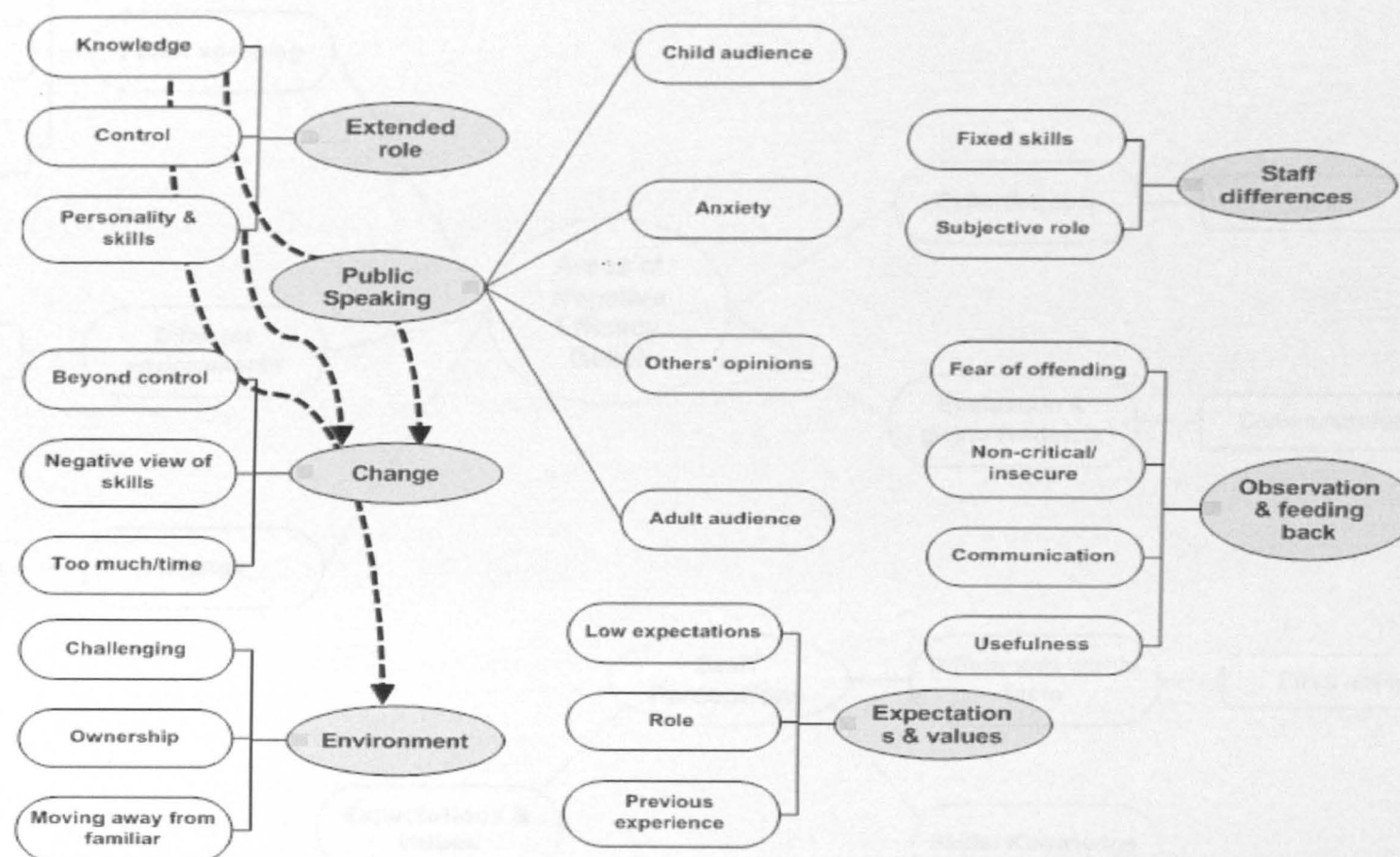
Timeframe	Work undertaken
Sept 2008 – Dec 2008	<ul style="list-style-type: none"> • Revisiting thesis proposal, considering practicalities of the initial design. • Re-planning aspects of the design and planning the implementation of the study within the context of the LA in which I was working. • Discussing research proposal with PEP and supervisor • Collecting articles, books, information etc. and reading around the topic further.
Jan 2009 – Feb 2009	<ul style="list-style-type: none"> • Discussions with my allocated primary schools regarding the background to my study and the research proposal. Ascertaining the views about their potential inclusion in the research as either the experimental or control school. • Random selection of Experimental and Control groups from the primary schools prepared to be involved in my study. • Contacting the Head Teachers of the selected schools and discussing their allocated research roles in more detail, and how I foresaw the research developing.
Early March 2009	<ul style="list-style-type: none"> • Meeting/Discussion with the head teacher at the school of the randomly selected experimental group. Discussion regarding priority focus of research i.e. areas of low self-efficacy amongst the staff team which may benefit from the application of positive psychology. • Planning stage focus group with randomly selected members of the experimental group to obtain their views regarding the research focus i.e. areas they felt they were least efficacious and would like positive psychology to be applied. • Thematic analysis of the focus group information; combining this with information elicited from the head teacher to generate main themes to inform the questionnaire.

Timeframe	Work undertaken
Mid – late March 2009	<ul style="list-style-type: none"> • Developing the questions using the main themes derived from the initial planning stage to inform this process. • Designing the questionnaire including the cover page and descriptive information recording sheet • Developing the Presentation on Positive Psychology to raise awareness and provide a foundation for the intervention. • Planning for the focus groups, i.e. structure, process and construction of questions
Early April 2009	<ul style="list-style-type: none"> • Initial distribution of the questionnaires in the control and experimental group • Continued reading and research • Continued development of the Positive Psychology presentation
Late April 2009	<ul style="list-style-type: none"> • Collection of completed questionnaires from control and experimental schools • Conducted the pre-intervention focus group in the experimental school to enrich the data with qualitative information. • Presented 'Positive Psychology: A brief History' to the experimental group to enhance their understanding of the theory and underpinning philosophy of Positive Psychology. • Launch of practice tasks: Reframing thinking to consider positive rather than negative occurrences, trying to think of 3 good things each day, to reflect on positive outcomes and consider the personal contribution, acknowledging strengths, discussing positive events with others.
Early May 2009	<ul style="list-style-type: none"> • Development of intervention recording materials. • Continued reading and research
Mid May 2009	<ul style="list-style-type: none"> • Launch of formal Positive Psychology intervention: Staff asked to record 3 good things and a causal explanation for each every day for one week in the booklet provided (Appendix 8)
Early June 2009	<ul style="list-style-type: none"> • Collection of intervention booklets • Informal discussion with participants regarding the usefulness of the intervention.

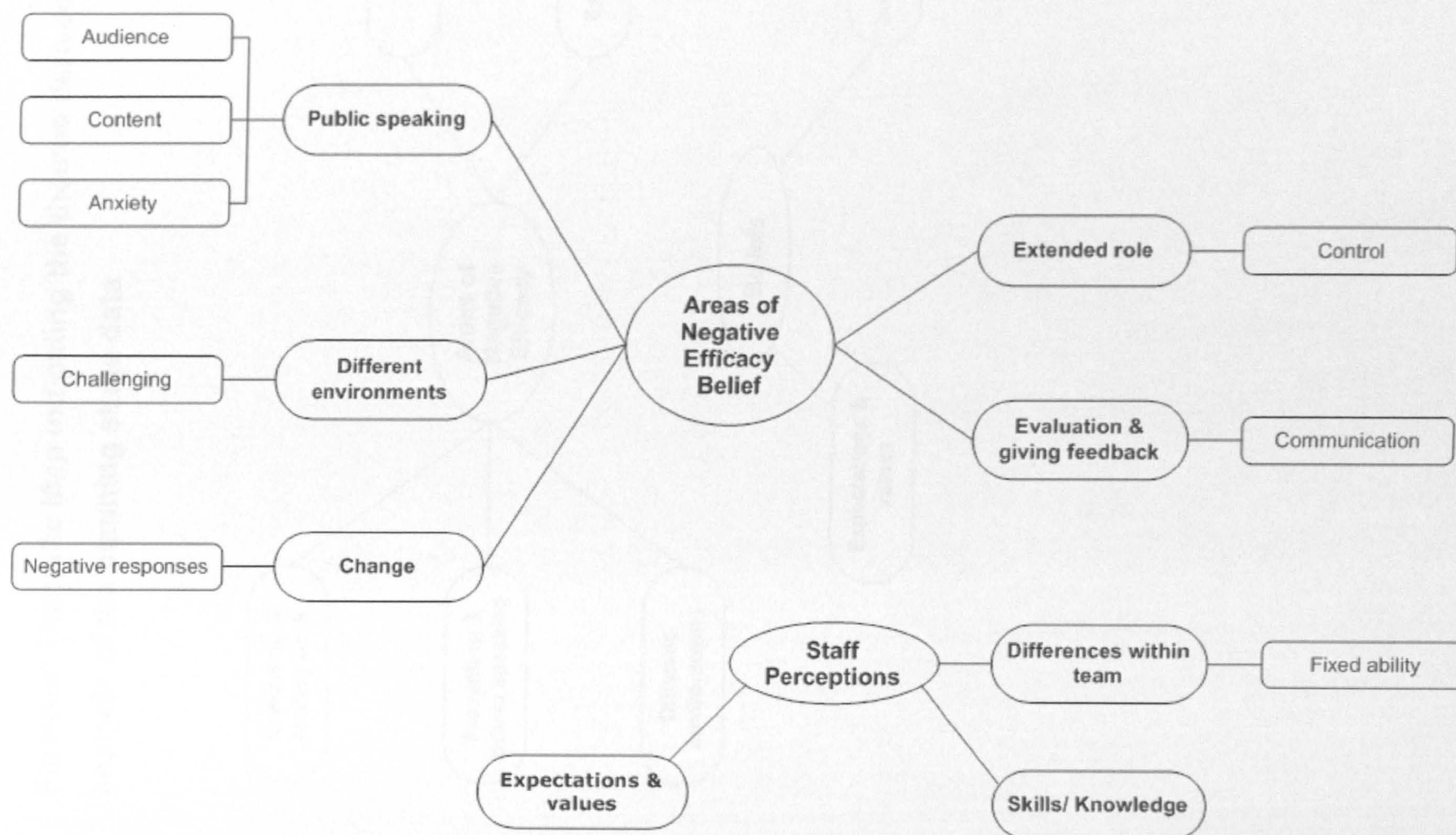
Timeframe	Work undertaken
	<ul style="list-style-type: none"> • Distributed second phase of questionnaires in both experimental and control schools.
Late June	<ul style="list-style-type: none"> • Collection of completed questionnaires from control and experimental schools • Conducted post-intervention focus group regarding the self-efficacy beliefs post-intervention and reflections of the research process.
July 2009 – Nov 2009	<ul style="list-style-type: none"> • Transcription and analysis of focus group data • Analysis of quantitative findings • Write up Introduction section • Write up of Findings section • Submit work completed to date
Dec 2009- Jan 2010	<ul style="list-style-type: none"> • Write up of Discussion section
Feb – March 2010	<ul style="list-style-type: none"> • Write up of Literature Review • Revise and submit draft version of written research • Write up of abstract
April 2010	<ul style="list-style-type: none"> • Revise and amend current version of written research ready for submission

Appendix 4: Planning Stage Thematic Maps

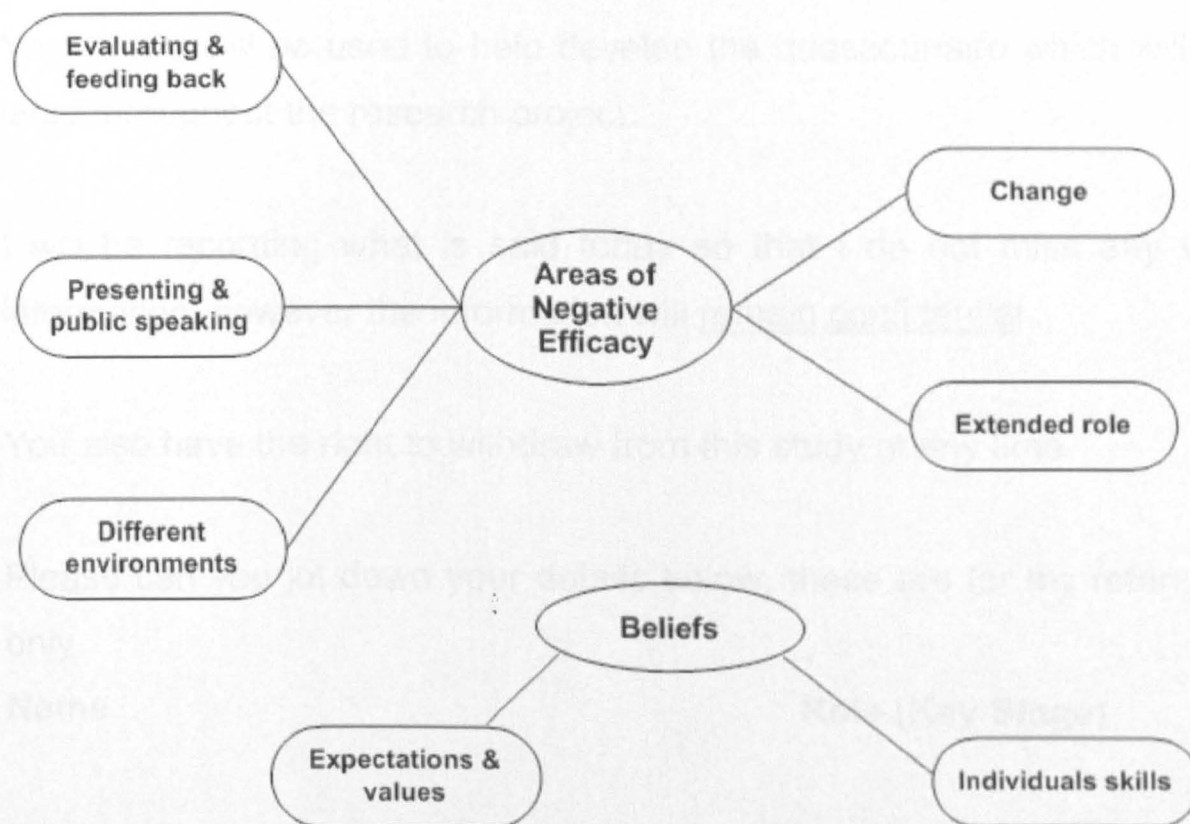
Initial Thematic Map indicating the themes derived through analysis of the planning stage data



Revised Thematic Map indicating the themes derived through the analysis of the planning stage data



Finalised Thematic Map indicating the themes derived through the analysis of the planning stage data



Appendix 5: Focus Group Sign-in sheet

Thank you for volunteering to be a part of this focus group.

Your views will be used to help develop the questionnaire which will be used throughout the research project.

I will be recording what is said today so that I do not miss any vital information; however the information will remain confidential.



You also have the right to withdraw from this study at any time.

Please can you jot down your details below, these are for my reference only.

Name	Role (Key Stage)
.....
.....
.....
.....
.....

Thank you.



Appendix 6: Positive Psychology PowerPoint Presentation

Positive Psychology: a brief history


Presentation to support school research.

Hannah Critchley
Educational Psychologist in Doctoral Training

What is Positive Psychology?

- Positive Psychology is the scientific study of what goes well in life
- It is the science of positive aspects of life e.g.
 - Happiness
 - Well being
 - Flourishing



What is Positive Psychology?

Cont.

- Positive Psychology was founded by Martin Seligman, he describes it as:

"Scientific study of optimal human functioning that aims to discover & promote the factors that allow individuals & communities to thrive."

How is Positive Psychology different?

- Positive Psychology focuses upon people's potential.
- The objective of Positive Psychology is not to 'fix problems' but to research the things which make life worth living.

Positive Psychology; Explored

- Established in the late 1990's
- Rapidly developing field
- Aspires to bring solid empirical research into areas such as:
 - Flow
 - Personal Strengths
 - Happiness
 - Optimism
 - Characteristics of positive groups & institutions



Why do we need Positive Psychology?

- For the most part mainstream psychology has focused upon the negative aspects of human life.
- Negative aspects had not intentionally been the focus of psychologists, however they landed on this path due to a historical accident...

Why do we need Positive Psychology? Cont.

- Prior to WW2 psychologists had 3 objectives:
 1. Cure mental Health
 2. Improve normal lives
 3. Identify and nurture high talent.
- After the war the second and third objectives seemed to lose momentum...

Historical roots of Positive Psychology

- "Psychology has a long past but only a very short history" (Boring, 1950)
- Positive Psychology asserts itself as a new and forward thinking discipline, however the concepts underpinning Positive Psychology are not all that new.
- Whilst psychology has only been a formal discipline for about 100 years, the enduring issues were captured by theologians, philosophers and everyday people centuries before.

Historical roots of Positive Psychology Cont

- In the 20th Century, many psychologists began to focus upon what would later become the core of Positive Psychology:
- Carl Jung: The concept of Individuation: "Becoming all that one can be"
- Maria Jahoda: Defining positive mental health
- Gordon Allport: Individual maturity
- This work opened the door for positive aspects such as flourishing and wellbeing to be considered in the study of prevention, wellness and enhancement.

Character strengths

- Seligman (2003) has identified 24 signature (higher) strengths which are associated with moral traits.
- Building strength and virtue is not about training, rather discovery, creativity and ownership.
- "Positive emotion leads to exploration which leads to mastery and mastery leads to more positive emotion but also an individual's signature strengths" (Seligman 2003)

Character strengths and virtues

(According to the Values In Action [VIA] institute)

- **Wisdom:** curiosity, creativity, love of learning, open mindedness, perspective
- **Courage:** Valour, persistence, integrity, zest
- **Love and Humanity:** Capacity to love and be loved, kindness, social intelligence
- **Justice:** Citizenship, leadership, Fairness
- **Temperance:** Self-control, prudence, humility and modesty, forgiveness and mercy
- **Transcendence:** Appreciation of beauty and excellence, gratitude, hope, humour, spirituality

Three levels of Happiness

There are 3 levels of happiness:

- Level 1: immediate, emotion (joy), limited cognition
- Level 2: on balance positives outweighs negatives in the long term, not concerned with pleasure and feelings but with judgements about re: balance of feelings, summed up by terms e.g. contentment and satisfaction
- Level 3: Not easily measured, broader sense of happiness, the idea of the good life, whereby the individual flourishes and fulfils their potential.

The Chemistry of Happiness

- Neuroscience states all feelings generate a neuro-chemical response.
- Endorphins are the body's natural opiates. They control pain and create pleasure and are released every time you laugh, relax and exercise.
- They create increased bonding in the brain and can enhance intelligence as a result.
- Happiness (and unhappiness) can be enhanced by our own actions.

The Broaden and Build Theory of positive emotions

- Barbara Fredrickson (2001).
- Positive affective experiences have a long lasting effect on personal health and development by:
 - broadening our thought action repertoire
 - Undoing negative emotions
 - Enhancing resilience
 - Building on our psychological repertoire
 - Triggering the upward developmental spiral

Positive Vs Negative emotions

- Positive emotions help on the road to wellbeing- however negative emotions are not unimportant.
- According to Boniwell (2006), negative emotions:
 - Bring us to depth and put us in touch with deeper selves
 - Can facilitate learning, understanding of ourselves and knowledge of the world (e.g. wisdom)
 - Experiencing and coping with negative affect can have positive social consequences e.g. empathy, modesty, moral considerations.

Levels of Positive Psychology

- There are 3 levels of Positive Psychology:
 - Subjective
 - Individual
 - Group
- Positive subjective experience is proposed to consist of feelings such as satisfaction, contentment, fulfilment, optimism and hope for the future (Dellaigh, 2004).
- Positive individual traits include the capacity for love, courage, strength of character, talents, wisdom and forgiveness (Seligman & Csikszentmihalyi, 2000).
- Positive institutions include families, schools, organisations and communities which foster a sense of citizenship, responsibility, tolerance and altruism (Peterson, 2006; Seligman & Csikszentmihalyi, 2000).

Levels of Positive Psychology

Cont.

- It has been implied that within these levels a theory exists;
- Positive institutions facilitate the development of positive traits, these traits in turn, facilitate positive subjective experiences.

(Park & Peterson, 2003).

Enabling Institutions

- Like individual characteristics, positive institutions are often described as having common features.
- These are known as Institutional level Virtues.
- Enabling institutions work towards the goals of the organisation whilst fulfilling the goals of the individuals within it.

Institutional Level Virtues (ILV)

- Moral characteristics of the group as a whole (not composites of individual members)
- They are an enduring part of the institutional culture.
- Not just the bottom line – but the same moral goals
- Constitute to the fulfilment of its members
 - Fulfilment must reflect effort, wilful choice and pursuit over time of morally praiseworthy activities

Institutional Level Virtues (ILV)

cont.

- ILVs need to influence the actual conduct within an organization in recognisable ways.
- They must be celebrated and serve as a source of identity and pride for the organisations members.
- ILV should provide a reason to remain as part of an institution e.g. this is a good school to work in (generating feelings of fulfilment, satisfaction and gratification).

Core Institutional Level Virtues

- Research suggests the core institutional virtues include:
 - **Purpose:** shared vision of moral goals
 - **Safety:** protection against threat etc
 - **Fairness:** equitable rules governing reward & punishment which are consistently reinforced
 - **Humanity:** mutual care and concern
 - **Dignity:** treatment of all members as individuals regardless of role.

Summary: Enabling institutions

- A good institution enables the good life for its members (Myers & Diener 1995)
- A good organisation can inspire its members to be more than they are; to reveal dormant strength of character or to create new ones which allow them to rise to the occasion deemed important by the institution (Peterson 2006)

The Good School

- Maehr (1991): Good schools have a shared vision of their purpose:
 - What does it stand for?
 - What does it strive for?
- Focus on the moral goals of education as well as achievement whilst emphasising the individual student.
- A school needs to provide explicit goals for students to adopt them;
 - Goals increase motivation to learn, investment in the process and the commitment to the hard work that achievement requires (Maehr & Midgley 1996).

Conclusions re: good schools

- Students perceive:
 - lessons to be relevant
 - that they have control over what happens to them
 - school discipline policy to be fair, firm, clear and consistently enforced focusing on skill building and improvement rather than punishment
 - rewards systems to be rational and that they recognise achievement, effort and positive behaviour
 - the head teacher as a strong leader
 - that practices are in place which decrease the impersonality of the school and increases contact between teachers and students, which in turn improves the students feeling of belonging and connectedness.

Appreciative Inquiry (AI)

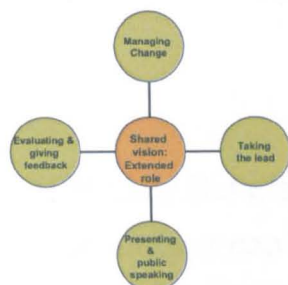
- AI (Cooperryder 2001) is a key approach to bringing about institutional change using Positive Psychology.
- AI involves thinking about and reflecting upon what is working well in a variety of situations and appreciating the value of something that has worked.
- One intervention with AI at its core can be referred to as 'WWW', 'sparking moment' or '3 good things in life'.

Current research

Three good things in life

- Write down three things that go well each day and reflect upon and record their causes each night for one week. Please provide a causal explanation for each good thing and try to relate this to your skills and expertise.
- Getting into the positive mind set; practice needed???
- Proposed recording period: 18.05.09- 22.05.09???

Themes or domains on which to focus positive thoughts



Your thoughts???

- Any suggestions?
- Any questions?
- Thank you

Appendix 7: Questions for the Head Teacher: planning session

Definitions

Perceived Self Efficacy Beliefs:

Peoples' beliefs about their capabilities to produce designated levels of performance that exercise influence over their lives.

Peoples' beliefs about their capabilities to produce (positive) effects.

Collective teacher efficacy:

Perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students.

Peoples' beliefs about the team's capabilities to produce (positive) effects.

Questions:

1. Do you feel that for the purpose of the study you would like to focus on an area specific to a particular group(s) in school?
2. In what areas do you feel that staff in this group(s) have particularly positive self efficacy beliefs?
3. In what areas do you feel that staff this group(s) have particularly negative efficacy beliefs or that the self efficacy beliefs could be improved?
4. Which of these areas do you consider to be your priority and would like to be the focus of this research and why?
5. Do you feel that your views will be reflected in the staff's responses?

Appendix 8: Example of Intervention Recording Booklet



Positive Psychology Intervention:

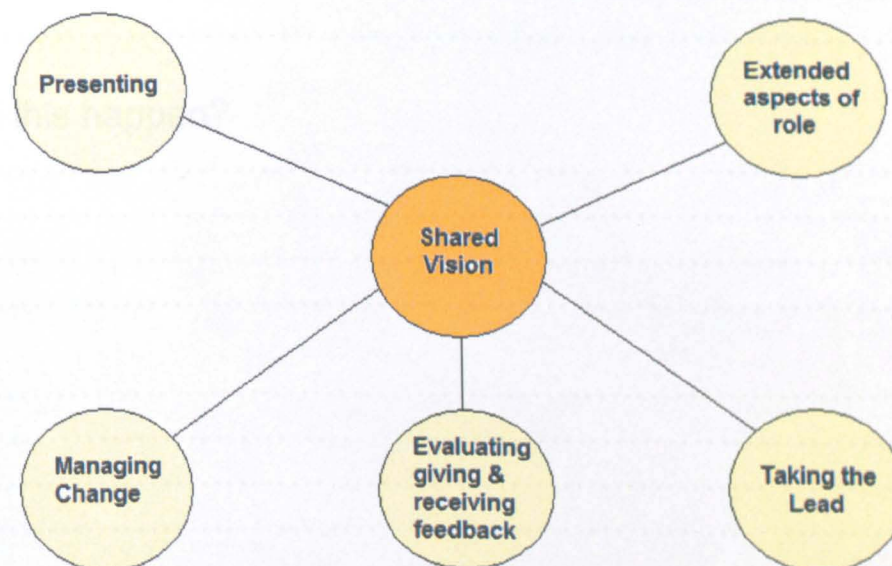
Three Good Things

Three Good Things

As discussed in the presentation I would like you to spend some 1 day reflecting upon the good things that have happened. Think positives and the role you have played in making them happen!

Please take time to record the 'three good things' that have occurred how you are responsible for them. Try to think about your skills and traits which have enabled the good thing to happen.

If possible try to link the good things to the themes below.



This information will be kept confidential.

Thank you for taking the time to participate!

Three good things that happened on:
Monday

1.....
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Why did this happen?

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2.....
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Why did this happen?

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3.....
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Why did this happen?

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If you would like to have this booklet returned to you following analysis, please can you put a tick the appropriate box and indicate who the booklet should be returned to.

Would you like to have this booklet back?

Yes ☐ No ☐

If yes, please indicate to whom I should return the booklet:

.....

If you would like to continue with this intervention and would like the electronic template please email me on the address below:

hannah.critchley@*****.gov.uk

Thank you for taking the time to participate in my intervention.

It is greatly appreciated!

Appendix 9: Questions and responses regarding the ‘three good things in life’ intervention (Seligman *et al*, 2005)

1. How easy was it to complete the Positive Psychology ‘three good things in life’ intervention?

‘It was easier on some days than others’

‘It was hard at first to find three good things’

2. How easy did you find it to consider the positives rather than the negatives each day?

‘Not as easy’

‘I never look at the positives always the negatives, so it was hard’

‘I’m critical of myself, so it was hard at first’

‘The hardest bit was trying to think why it had happened, because lots of factors influenced them like the children and the weather’

3. How easy was it to consider the reasons behind the three good things?

‘It was difficult to get the reasons; sometimes I was just writing something for the sake of it’

‘Its definitely easier to think of reasons why things go badly, so it was hard at first to think of the positive reasons’

‘Yeah, it was hard trying to get into the habit of thinking positively!’

4. How easy was it to attribute the causes of the three good things to you and your skills?

‘It was a mixture, like in planning meetings others were involved, so it was a team thing’

‘At weekends you were more likely to attribute them to you’

‘In school you were more likely to include others in the reason’

5. Did you find that writing the three good things down helped you to reflect more easily?

‘Writing it definitely made it easier when reflecting back on the reasons’

‘It made you stop and think more about it’

‘When writing specifically about the positives, sometimes the negatives creep in’

6. How easy was it to relate the three good things to the identified themes?

‘Some things were good to link’

‘Tended to relate them more to the team’

'The themes seemed more team related than personal'

'Themes link in more to school and professional things, sometimes the positives occurred at home'

7. Do you feel that one week was enough to make a difference?

'It would probably work better over a longer time'

'You'd get more into it if it lasted longer, like better at it with practice'

'Keeping a diary does help to change the way you think, so maybe longer would be better'

'There was lots of talking in school about being positive, giving yourself brownie points'

'If it lasted longer I think it would filter down to the kids- get them to think of the positives'

'It was hard work in the last week of term and there were outside influences that impacted on how positive I was. Like wet weather meant indoor play and that affected my plans'

Appendix 10: Checking the frequencies of categorical variables within data set

Table indicating the frequency statistics of the entire data set

Number of cases	Participant Gender	Condition	Phase	Role within school
Valid	140	140	140	140
Missing	0	0	0	0

Table indicating the frequency statistics relating to participant gender

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	8	5.7	5.7	5.7
Female	132	94.3	94.3	100
Total	140	100	100	

Table indicating the frequency statistics relating to condition

Condition	Frequency	Percent	Valid Percent	Cumulative Percent
Experimental	70	50	50	50
Comparison	70	50	50	100
Total	140	100	100	

Table indicating the frequency statistics relating to phase

Phase	Frequency	Percent	Valid Percent	Cumulative Percent
Pre- intervention	70	50	50	50
Post- intervention	70	50	50	100
Total	140	100	100	

Table indicating the frequency statistics relating to role within school

Role	Frequency	Percent	Valid Percent	Cumulative Percent
Senior Leadership Team	20	14.3	14.3	14.3
Teaching staff	48	34.3	34.3	48.6
Non-teaching staff	64	45.7	45.7	94.3
Clerical staff	8	5.7	5.7	100

Appendix 11: Checking descriptive statistics within continuous data

Descriptive Statistics	N	Minimum	Maximum	Mean	Standard Deviation
I am able to take the lead successfully when working in partnership with my colleagues	140	2	8	5.78	1.42
I am able to take charge of a situation and instruct/direct my colleagues when requested	140	2	8	5.87	1.35
I am able to evaluate and provide constructive feedback to my colleagues	140	3	8	5.93	1.25
I am able to accept feedback, advice and guidance offered by my colleagues regardless of role	140	4	8	6.49	1.01
I am able to extend my role to include additional responsibilities	140	3	8	6.46	1.16
I am confident in my ability to present to colleagues, managers and governors in forums such as the team meeting	140	1	8	4.82	2.02
I am confident in my ability to deliver whole school assemblies	140	1	8	4.35	1.98
There is a shared vision amongst staff of how school could be if we challenged and extended ourselves to fulfil our potential	140	1	8	4.93	1.35
I am able to perform well in all extended aspects of my role to work towards achieving the school's shared vision	140	4	8	6.15	1.03
All staff are able to fulfil all extended aspects of their roles to work towards achieving the school's shared vision	140	3	8	5.21	1.29
I am successfully able to manage change within school systems	140	4	8	6.36	.95
I am able to successfully incorporate new initiatives into my practice	140	1	8	6.30	1.33
I am able to be flexible in terms of my practice and adapt to new environments and audiences	140	4	8	6.34	.97
All staff are able to work flexibly and are capable of adapting their practice according to the audience and environment	140	2	8	5.26	1.42
Total efficacy score	140	51	104	80.1	12.66
Valid N (listwise)	140				

Appendix 12: Tests of Normality across the data set.

Tests of normality for the experimental group total efficacy score

<i>Kolmogorov-Smirnov^a</i>			
Condition	Statistic	Df	Significance
<i>Pre- intervention</i>	.15	35	.05
<i>Post- intervention</i>	.14	35	.06

Test of normality for experimental data set only pre-intervention total efficacy and post-intervention total efficacy scores were greater than .05 therefore not significant and data is normally distributed.

Score on pre-intervention $D(35) = 0.15$ $p > .05$

Score on post-intervention $D(35) = 0.14$ $p > .05$

Tests of normality for the comparison group total efficacy score

<i>Kolmogorov-Smirnov^a</i>			
Condition	Statistic	Df	Significance
<i>Pre-intervention</i>	.11	35	.20
<i>Post-intervention</i>	.09	35	.20

Test of normality for comparison data set only; pre-intervention total efficacy and post-intervention total efficacy scores were greater than .05 therefore were not significant and the data is normally distributed.

Scores on pre-intervention: $D(35) = .11$ $p > .05$

Scores on post-intervention: $D(35) = 0.09$ $p > .05$

Test of normality for the total efficacy scores according to role

Kolmogorov-Smirnov^a			
Total efficacy score	Statistic	Df	Significance
<i>Senior Leadership Team</i>	.16	10	.20
<i>Teaching Staff</i>	.14	24	.20
<i>Non-teaching support</i>	.10	32	.20
<i>Clerical staff</i>	.29	4	

Test of Normality for the roles within school. SLT, TS and NTS were all not significant which means data is normally distributed.

Senior Leadership Team $D(10) = 0.16$, *ns*

Teaching staff $D(24) = 0.14$, *ns*

Support staff $D(32) = 0.10$, *ns*

Test of normality for the total efficacy scores according to role

Shapiro-Wilk			
Total efficacy score	Statistic	Df	Significance
<i>Senior Leadership Team</i>	.98	10	.97
<i>Teaching Staff</i>	.97	24	.58
<i>Non-teaching support</i>	.96	32	.34
<i>Clerical staff</i>	.86	4	.27

Clerical staff: The Kolmogorov-Smirov test did not produce a figure; this is because the test is not sensitive to calculate distribution due to the size of the clerical sample. However, according to the Shapiro-Wilk Test $W(4) = .27$, *ns*

Test of normality for the 'take the lead' theme

<i>Kolmogorov-Smirnov^a</i>			
Condition	Statistic	Df	Significance
<i>Take the lead pre-intervention</i>	.14	35	.09
<i>Take the lead post-intervention</i>	.14	35	.08

Test of normality for the 'take the lead theme'. Not significant therefore, the data is normally distributed.

Take the lead pre-intervention: $D(35) = 0.14$, $p > .05$

Take the lead post-intervention: $D(35) = 0.14$, $p > .05$

Test of normality for the 'evaluation, giving and receiving feedback' theme

<i>Kolmogorov-Smirnov^a</i>			
Condition	Statistic	Df	Significance
<i>Eval and fdbk pre-intervention</i>	.19	35	.00
<i>Eval and fdbk post-intervention</i>	.21	35	.00

Test of normality for 'evaluation, giving and receiving feedback theme. Significant therefore data is not normally distributed i.e. both were significantly not-normal.

Evaluation and Feedback pre-intervention: $D(35) = 0.19$, $p < .005$

Evaluation and Feedback post-intervention: $D(35) = 0.21$, $p < .001$

Test of normality for the 'fulfilling extended aspects of role' theme

<i>Kolmogorov-Smirnov^a</i>			
Condition	Statistic	Df	Significance
<i>Extended role pre-intervention</i>	.14	35	.07
<i>Extended role post-intervention</i>	.17	35	.01

Test of normality for the 'fulfilling extended aspects of role theme'. Not significant therefore data is normally distributed.

Extended aspects of role pre-intervention: $D(35) = 0.14$, $p > .05$

Extended aspects of role post-intervention: $D(35) = 0.17$, $p > .05$

Test of normality for the 'presenting' theme

<i>Kolmogorov-Smirnov^a</i>			
Condition	Statistic	Df	Significance
<i>Presenting pre-intervention</i>	.14	35	.09
<i>Presenting post-intervention</i>	.10	35	.20

Test of normality for presenting theme. Not significant therefore possible to assume that the data is normally distributed.

Presenting pre-intervention: $D(35) = 0.14$, $p > .05$

Presenting post-intervention: $D(35) = 0.10$, $p > .05$

Test of normality for the 'managing change' theme

<i>Kolmogorov-Smirnov^a</i>			
Condition	Statistic	Df	Significance
<i>Man. Change pre-intervention</i>	.12	35	.20
<i>Man. Change post-intervention</i>	.12	35	.20

Test of normality for managing change theme. Not significant therefore it can be assumed that data is normally distributed.

$D(35) = 0.12$, $p > .05$

Test of normality for the 'shared vision' theme

<i>Kolmogorov-Smimov^a</i>			
Condition	Statistic	Df	Significance
<i>Shared vision pre-intervention</i>	.17	35	.01
<i>Shared vision post-intervention</i>	.10	35	.20

Test of normality for shared vision/collective efficacy theme. Significant therefore it can be assumed that the data is not normally distributed.

Shared vision pre-intervention: $D(35) = 0.17$, $p < .05$

Shared vision post-intervention: $D(35) = 0.10$, $p > .05$

Appendix 13: Tests of Homogeneity of variance across the data set

Tests of homogeneity of variance for the experimental groups' pre and post-intervention total efficacy score

<i>Total efficacy score</i>	<i>Levene Statistic</i>	<i>Df1</i>	<i>Df2</i>	<i>Significance</i>
<i>Based on Mean</i>	.85	1	68	.36

Test of homogeneity of variance for experimental pre and post-intervention data. Sig is greater than .05 therefore it is not significant, implying that the variances are not significantly different, therefore the assumption that they are similar is tenable.

$$F(1, 68) = 0.85, ns$$

Test of homogeneity of variance for the 'take the lead' theme

<i>Role within school</i>	<i>Levene Statistic</i>	<i>Df1</i>	<i>Df2</i>	<i>Significance</i>
<i>Based on Mean</i>	1.16	1	68	.28

Test of homogeneity of variance for Take the lead theme. Not significant therefore there is no significant difference between variances; as such the assumption that they are similar is acceptable.

$$F(1, 68) = 1.16 p > .05$$

Test of homogeneity of variance for the 'evaluating, giving and receiving feedback' theme

<i>Role within school</i>	<i>Levene Statistic</i>	<i>Df1</i>	<i>Df2</i>	<i>Significance</i>
<i>Based on Mean</i>	.83	1	68	.37

Test of Homogeneity of Variance for Evaluation and feedback theme. Significance is greater than .05 therefore it is not significant; implying that the variances are not significantly different, therefore the assumption that they are similar is tenable.

$$F(1, 68) = 0.83, ns$$

Test of homogeneity of variance for the 'extended aspects of role' theme

<i>Role within school</i>	<i>Levene Statistic</i>	<i>Df1</i>	<i>Df2</i>	<i>Significance</i>
<i>Based on Mean</i>	1.26	1	68	.95

Test of Homogeneity of Variance for the extended aspects of role theme. Significance is greater than .05, therefore it is not significant. The assumption that the variances are similar is therefore tenable.

$$F(1, 68) = 1.26, ns$$

Test of homogeneity of variance for the 'presenting' theme

<i>Role within school</i>	<i>Levene Statistic</i>	<i>Df1</i>	<i>Df2</i>	<i>Significance</i>
<i>Based on Mean</i>	.00	1	68	.95

Test of Homogeneity of Variance for the presenting theme. Significance is greater than .05, therefore it is not significant. The assumption that the variances are similar is therefore tenable.

$$F(1, 68) = 0.00, ns$$

Test of homogeneity of variance for the 'managing change' theme

<i>Role within school</i>	<i>Levene Statistic</i>	<i>Df1</i>	<i>Df2</i>	<i>Significance</i>
<i>Based on Mean</i>	1.37	1	68	.25

Test of homogeneity of variance for the managing change theme. Significance is greater than .05 therefore it is not significant; implying that the variances are not significantly different, therefore the assumption that they are similar is tenable.

$$F(1, 68) = 1.37, ns$$

Test of homogeneity of variance for the 'shared vision' theme

<i>Role within school</i>	<i>Levene Statistic</i>	<i>Df1</i>	<i>Df2</i>	<i>Significance</i>
<i>Based on Mean</i>	2.93	1	68	.09

Test of Homogeneity of Variance for Shared vision theme. Significance is greater than .05 therefore it is not significant; implying that the variances are not significantly different, therefore the assumption that they are similar is tenable.

$F(1, 68) = 2.93, ns$

Test of homogeneity of variance for role within school

<i>Role within school</i>	<i>Levene Statistic</i>	<i>Df1</i>	<i>Df2</i>	<i>Significance</i>
<i>Based on Mean</i>	1.59	3	66	.20

Test of Homogeneity of Variance for the roles within school. Not significant therefore there is no significant difference between variances; as such the assumption that they are similar is acceptable

$F(3, 66) = 1.59, p > .05$

Appendix 14: Calculations for determining effect size

Calculating effect size for independent-samples t-tests

$$\text{Eta squared} = \frac{t^2}{t^2 + (N1 + N2 - 2)}$$

Calculating effect size for paired samples t-tests

$$\text{Eta squared} = \frac{t^2}{t^2 + N - 1}$$

Calculating effect size for Wilcoxon signed-rank test

$$r = \frac{Z}{\sqrt{N}}$$

Appendix 15: Quotes representing enhanced efficacy in relation to the themes

Shared vision:

*'I think we, how, know- we're now thinking about 'Oh what is- the vision- what's my part in it'...
'But hopefully as we move towards looking at the big picture of the big vision- everyone's skills
and attributes will be drawn on'.*

Taking the lead:

'Well I've taken the lead in a new situation, so that's already happening from that point of view.'

Presenting:

*'Fine. Absolutely fine. I've already done countless staff meetings so' ... 'As, I've been expected
to do it so it's not an issue, but I think people who said 'oh no I'd never do that' have actually
done some staff meetings since'*

Managing change:

*'I don't mind change- change is a good thing.' ... 'But not only that. I think sometimes, we might
fight change in the long run we realise, that perhaps it's a good thing for us'*

Evaluating, giving/receiving feedback

*'I think some people are more confident than others so I'd quite happily say 'oh, can you give me
some feedback on that? How was that? Did it, you know, what could I have done better?'...*

Appendix 16: Tables displaying the responses given by participants to the three good things in life intervention (Seligman *et al*, 2005)

Good thing	Causal Explanation
All the children completed the first test well	Good preparation
X had an excellent lesson observation	Because she worked hard
Got home on time	Shorter staff meeting
One child performed very well in the task	All the support Miss X had given
I felt my baby kick	Because I'm pregnant
X had a good day at school and she did well in her exams	Because she'd worked hard and revised
All children excited to go on the trip	Because we were going on a trip
The trip went well, all children had a good time as did the staff	Because the weather was good
X made the tea	Because I had moaned the night before
End of term	-
The last tests are done	The tests were completed
I had a lie in	Because there was no work to go to!
The house was looking clean	Because I cleaned it
My daughter came home from her friends	-
Made a scarecrow	-
Did the garden, looking great!	Because I had the time to garden
Spent the day with my family	-

Good thing	Causal explanation
Enjoyed the opportunity to praise the whole class in assembly, 1 st time in the year	They all worked extremely hard on their literacy, so I felt I should reward their efforts.
Enjoyed sharing lunch with other staff members whilst watching a stand-up comedian	BBC i-player! Just a random thing I wanted to share with my mates at work
Contributed to the staff meeting in the form of SEF	Enjoyed this extra responsibility
Productive PPA, and sorting out revision for Year 4 SATs	Really got loads done compared to usual, and managed to convince X to get the revision sorted
X getting her new job	Because she is a good person and a very talented teacher
A good sleep	Absolutely shattered and I fell asleep at a good time whilst reading! Bliss!
The sun was shining as I woke up! A good start to the day	N/A
Playing football in the rain with my old class	Enjoyed spending time with my old class
Having a really good feeling about the children doing well on their 'circuits and conductors' assessment	They enjoyed their learning and I felt increasingly competent at teaching this unit
Had a wonderful class trip- and the weather helped by improving!	-
Successfully returned back to school with 26 children and 5 staff. Seeing that the children really enjoyed the experience	Felt confident and became increasingly competent at the task at hand
Played football with friends and the sun was shining!	Good company, good weather
Went for a morning jog	Because I felt very motivated to do so
Bought chocolates to cheer up a member of staff who was upset	Its nice to do things for others
Played footy again- 3 nights in a row!	Good company, good weather
Sorted out my internet banking	Had time to do what I wanted
Set up an NSPCC direct debit to help the charity	Wanted to help others

Helped with the building work at Mosque	Wanted to help others
Gorgeous weather!	God was in a good mood!!!
Went to football match with friends	-
Had a barbeque with family	Arranged it in advance

Good thing	Causal explanation
My youngest son thought his maths GCSE had gone better than expected	He had prepared and work hard
I received good feedback from a form I had completed for school	My efforts over the weekend to complete it
Made progress on making my daughter's 21st Birthday cake	I had help from friends
Had our first pyramid club- this went well and all enjoyed it	We had prepared for the club and organised activities
Took a small group out for numeracy work and I felt I made good progress and had a better understanding	The children listened, asked questions and received individual attention
Did some catching up in the library which made me feel up to date and organised	Was given some time from class
My youngest secondary school today and went to the prom night- he was dressed so smartly; shirt, tie etc. I felt very proud of him	He looked like a young man rather than a school boy
Received a letter from a friend I don't see very often- its great to catch up	I had written to her previously
My daughter made tea and washed up	She wanted to help
Managed to get some good work done on my home-learning course	I made more effort to find the time and fit this into my evening
Had a long awaited new window fitted in the rear bedroom	Had saved money for this to be done
Received a card from my son's school congratulating him on all his good work throughout the year	He had worked hard and school recognised that
Enthusiastic reading session with children- all enjoyed this	All listened and tried hard
Had a good break-time outside on the playground, playing cricket with and games	The sun was shining and it was my duty

with the children	
Bough some new plants for the garden and put them in pots	Wanted to make the garden more colourful
Bought some new books for school from charity shops and they were in really good condition-a bargain	Trying to supplement reading stocks after cleaning many books from shelves
Visited my mum. She was very relaxed and chatty today which makes me feel good	She has good and bad days and this was a good one
Got up early and read my book. It was lovely and quite in the house	I made an effort to get p early
Had a family meal all together	We were all around at the same time and made the effort- This doesn't always happen during the week.

Good thing	Causal explanation
Celebration/achievement assembly in school	Planned part of the curriculum to help raise self esteem
Staff meeting- whole staff working together	Different members of SLT leading discussion groups on SEF
Meeting with Catering Manager and School Business Manager	Showed understanding of new procedures to be introduced after half term
Meeting with EWO- very positive, good progress towards attendance targets	Good communication between school and EWO
Meeting with parent about child protection concerns	Dealt with the matter quickly and offered support
Meeting with parent and Y6 pupil re: behaviour	Agreed course of action with parent/child and teachers
CAF meeting, very positive outcomes	Good joint working
Meeting with parent about child's punctuality	Dealing with issue quickly
Reception class to visit X Farm	Successfully organised
Beginning of half term break	Relaxed
Watched cricket at local club	Relaxed
X back from school adventure weekend	-
Went for a walk	Relaxed and away from daily grind

Good thing	Causal explanation
Children had a very good day at the local football club	Thanks to the staff at school and the football club's educational centre
Enjoyed my tea	X made it
X got 76% on his maths test	X made me very happy
Nice morning- not rushed to get to work	Got up on time- remembered to set my alarm clock
Started pyramid club	I took the lead and it was alright
Felt happy in the evening	I managed to do some painting of the wood
Conversation with my daughter	Had a good chin wag with my daughter about her holiday in Spain
X made me proud and happy	He scored level 4a in science
Pampered myself	Relaxed in the bath for a good 45 mins.
Conversation with X (daughter)	I'm going to be a grandma
Mixed feelings after conversation with daughter	She said I'm going to be a grandma
Nice meal tonight	Went to a Brazilian restaurant
Last day at work	Started 1 week holiday
Meet daughter after not seeing her for a couple of weeks	Went to visit her
Prepared for a few days away	Packed my bags for the trip
Visiting friends	Met X and X in their new home
Journey was long	Good journey, didn't seem too long
Nice meal	X and X prepared lovely meal for us
Nice time on the beach	Weather was beautiful
Good time with friends	Had a nice meal and talked about being a grandma
Son had a good time too	He played with his friends

Good thing	Causal explanation
Managed to talk a child who was very 'cross' into a better mood when he was brought in from the playground for hitting other children	I knew the child well enough to talk to him, kept calm and used gentle persuasion with him.
Positive contributions added to School Self Evaluation Form at staff meeting	Everyone wanted to highlight the achievements of the school
Gave 'star of the week' reward to a child who was very pleased because he got 2 stars. He kept showing others his stars	He had worked hard for the stars. He was very proud of his achievement. It helped his self esteem.
Managed to stop a child 'head-butting' the table and being cross and disrupting rest of class	Kept calm. Persuaded him I had a nice alternative for him
Successful meeting re: child's annual review. All in agreement about issues.	All working together and want best for child and school. Everyone positive.
Pleased for staff member who got another job. Recognised this was good for her personally.	She was best person for job. She needed this to develop personally.
Met the British Council representative for Pakistan who was very positive we could carry on our connecting classrooms project.	We have worries about carrying it on due to communication difficulties and the political situation in Pakistan. She is very positive as wants project to succeed.
A staff member came to meeting with Speech Therapist. This staff member usually avoids such meetings.	Hopefully she felt the environment was safe and hopefully she wanted to know what was happening
A child shown to be making good progress in phonic work	Much determination and repetition!
Successful afternoon in a class which has several children with behaviour problems and have been on tests all week and very unsettled at the moment.	Kept the lesson practical and full of activities rather than expecting written work
Successful TAC meeting with many positive issues raised and steps forward made with parent	All professionals working together to help parent and child. Gentle persuasion of parent
Successful training session of other staff on new reading scheme	All working together. All listening to each other

Got class trip to local Cathedral sorted and booked	The power of email and some very nice people at the Cathedral
Everyone is in a good mood as finishing for half term	Everyone looking forward to a week's holiday
Managed to get all review reports out on time	Needed to as last date possible but felt good to get it done
We visited both sets of our parents	We wanted to see them before going off on our cycling holiday
We got an invite to a Christening	X's niece is having a her little girl Christened in July and wants all family to be there
We finished packing for our cycling holiday	We had to! Up and off in the morning!
We got the bikes on the train despite the 'two bikes only' policy and there were four bikes	The guardsmen were obviously being positive!
The weather was lovely and warm, after the recent poor weather! Good cycling weather!	That's how the British weather is
We managed to cycle to our firs BandB- which was very nice	If we didn't get far we would have nowhere to sleep!

Good thing	Causal explanation
X (student) contributed to my lesson instead of rocking on his chair all afternoon!	Well planned lesson that posed no threat to his self esteem (something he knew something about and enjoyed)
Chinese for tea. Yum!	Didn't defrost any meat this morning (Oops!)
X though my presentation for my interview was clear, fluent and informative. V. positive	Lots of time put in and 4 practice runs
Got a new job!	Because I have worked hard in my role and I worked hard to sell myself in the presentation and interview.
People were happy for me and sad to see me go	Because I've been a good friend and supportive to all staff since I came in September.
Went to the pub for tea and bottles of wine were on offer	Because my boyfriend wanted to treat me! The credit crunch = wine offer
Hangover didn't kick in until 3.30 pm!	Kept myself busy!

All four staff were in supporting our student without anyone feeling left out or undervalued	Good communication and positivity!
Spoke to Head Teacher about organising some ICT team teaching- and he was happy for me to draw up a timetable	Because I know what I need to finish in my role before I leave
Got ten reports finished with co-worker	Worked together on the task
Year ½ understood about not giving out their personal details to people on the internet (successful e-safety lesson)	Well planned and simple tasks so they could show their understanding
Meeting with KS3 transition co-ordinator from secondary school- passed on info about a dyslexic boy who has good intelligence and was confident to request that he should be in higher sets.	Collected SEN info and gave to him, explained the situation clearly.
Productive meeting with colleague about ICT and team teaching	Tried to demonstrate the things I was talking about and we listened to others' ideas
My friend got a job...Finally	Because she is fab and someone spotted it!
Volunteered our school to host the next Eee PC meeting	Because I want to show how busy our Yr 5 teacher has been and how well she is doing with the Eee PCs
Lie in at my sisters	Darker curtains
Relaxed all day watching films and snoozing on the sofa	We had all worked so hard all week
Delicious Indian meal	Recommended by sister's partner
Went to the beach in Sunderland with the top down on the convertible	Weather was nice- Boyfriend insisted on driving us in his car
Boyfriend's new bar-coded ticket system worked well at the club we worked on the door at	Lots of hard work and organisation
Got the last table in the sun in the beer garden for tea	The pub door was having a BBQ and everyone was there!